MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL RAILROAD AND FINANCIAL NEWSPAPER.

Manufacturers' Record in 1893

Because of the improved business conditions in the South, due to the advance in cotton, more abundant food crops and the settlement of political issues, the coming year will be a period of unusual activity in every line of Southern industry and commerce. The MANUFACTURERS' RECORD has undergone radical changes during the past year, by which its interest for its readers and the value of its services to advertisers have been materially increased. It occupies a distinct field and has a marked character of its own, which render it unique among trade and technical publications. The practical man who bears the responsibilities of any important industrial establishment, whether in the North or South, can derive distinct benefit from a careful reading of its columns. Any man who desires to keep well posted upon industrial practices and progress can obtain more than four dollars' worth of beneficial information from its pages in any single issue. Four dollars pays for a year's subscription, giving a minimum of 1,000 pages of interesting, instructive and profitable reading matter.

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VOL. XXII. No. 21.

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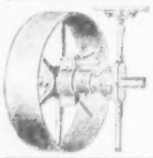
Baltimore, December 23, 1892.



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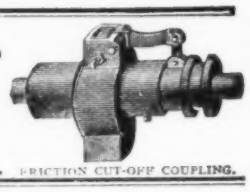

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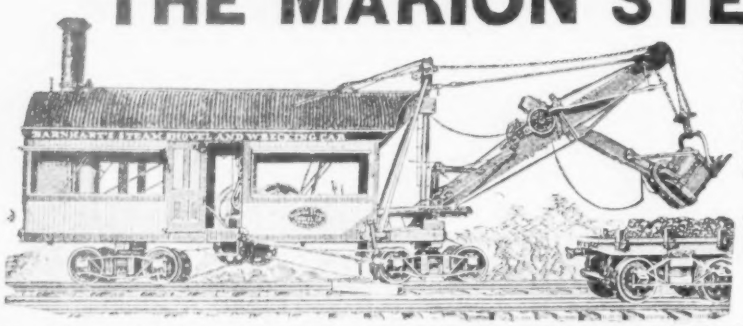

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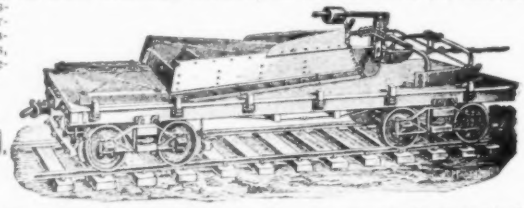

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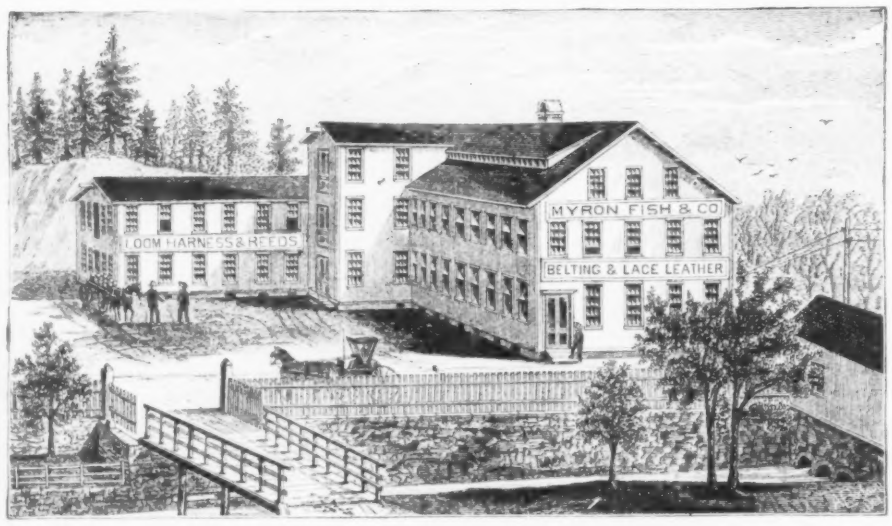

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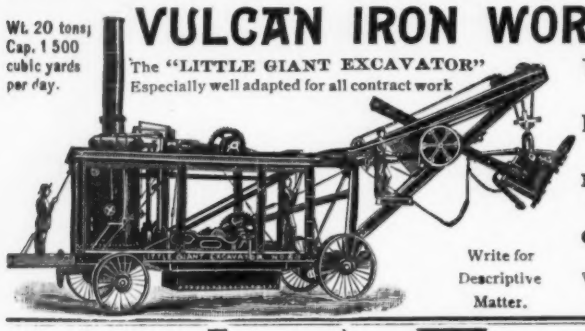

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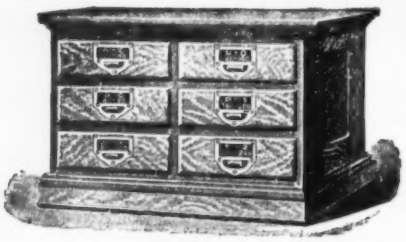

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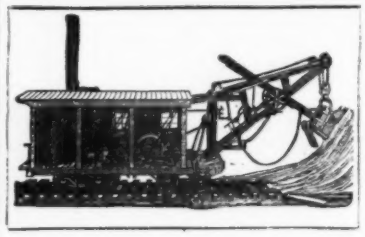

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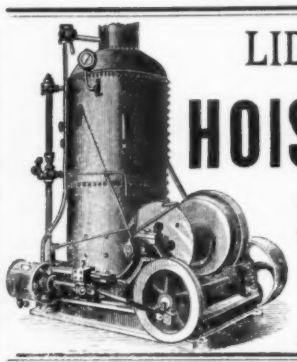

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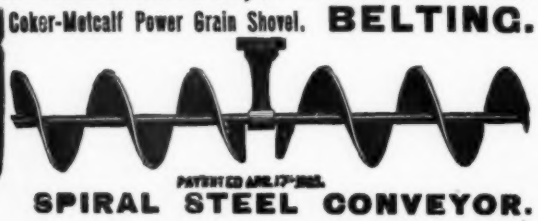

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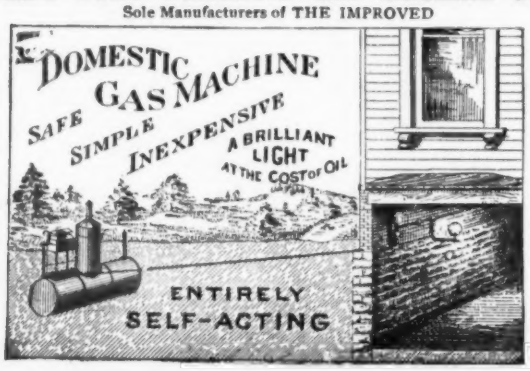

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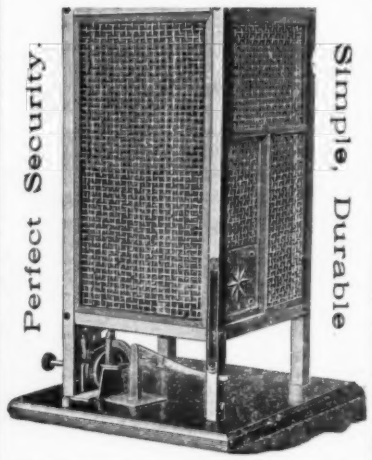

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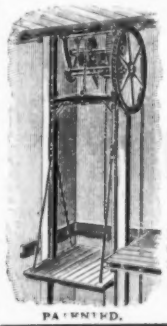

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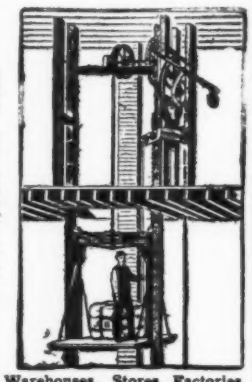

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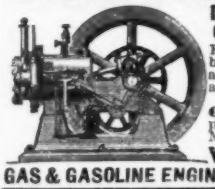

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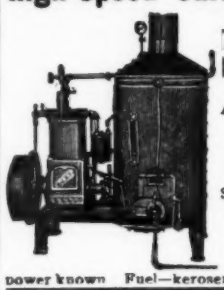

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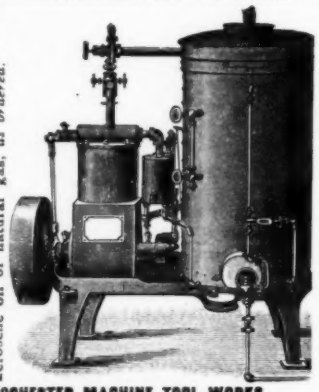

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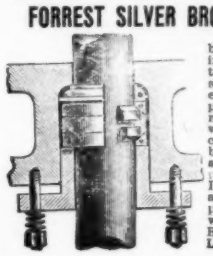

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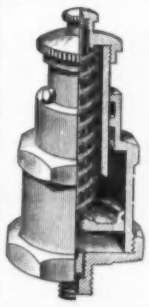

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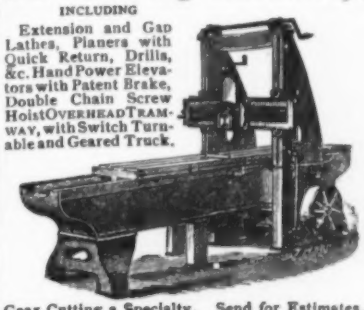

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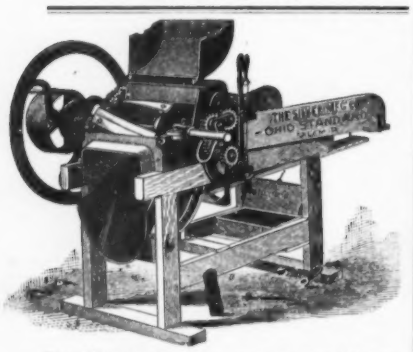

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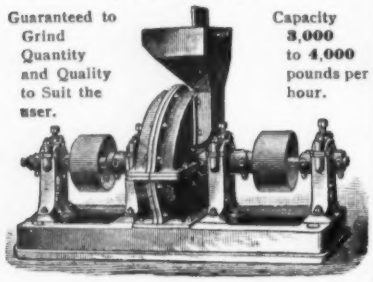

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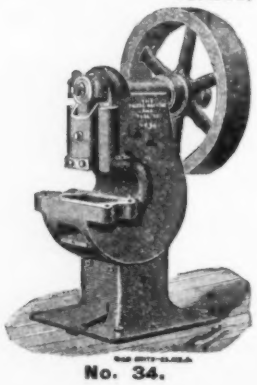

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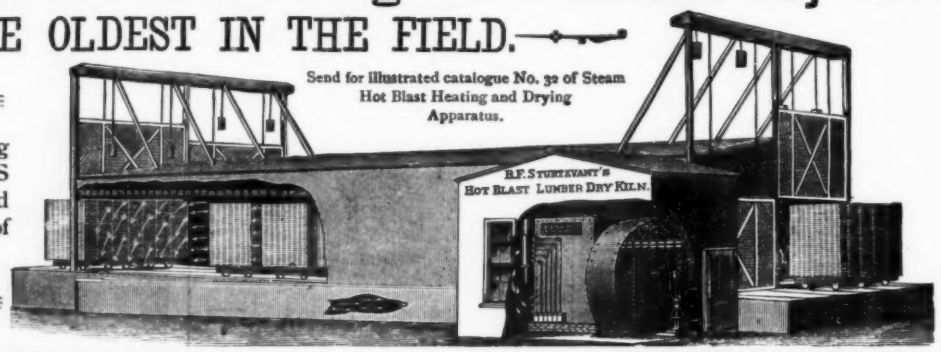

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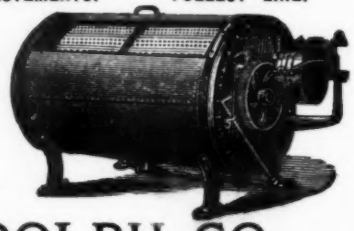

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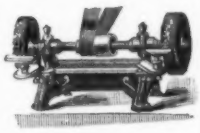

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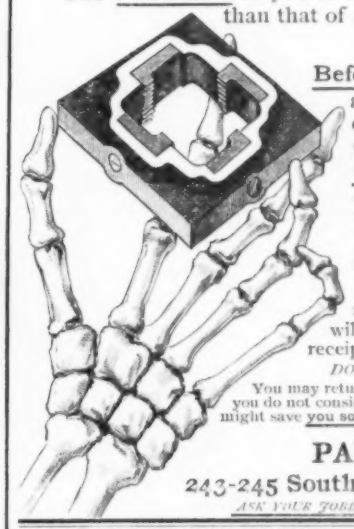

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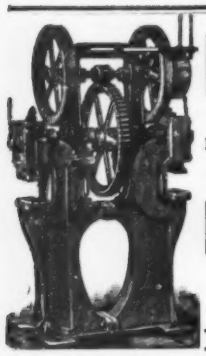

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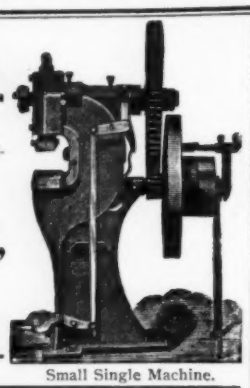

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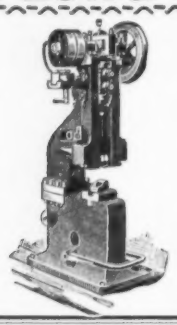

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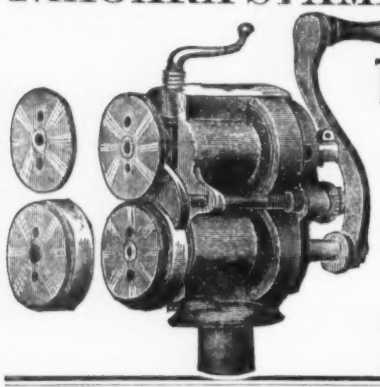

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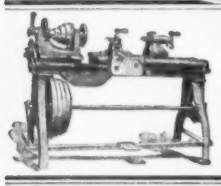

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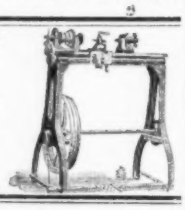

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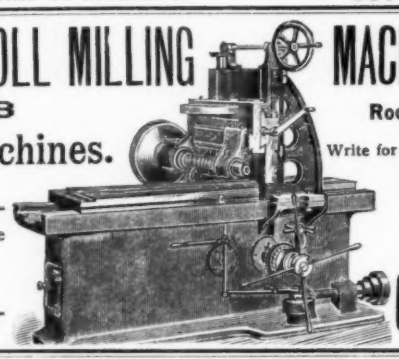

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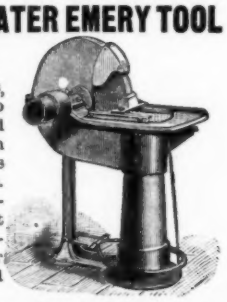

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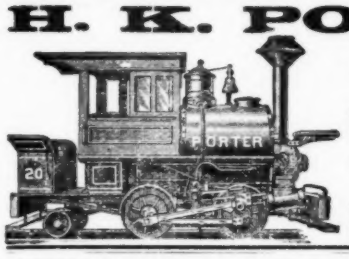

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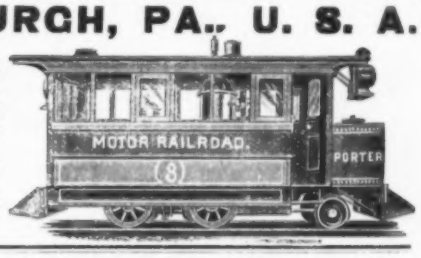

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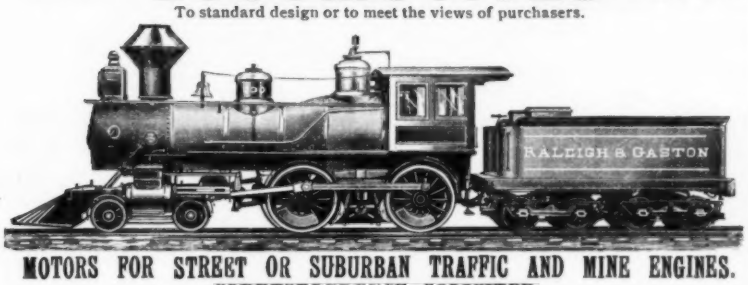

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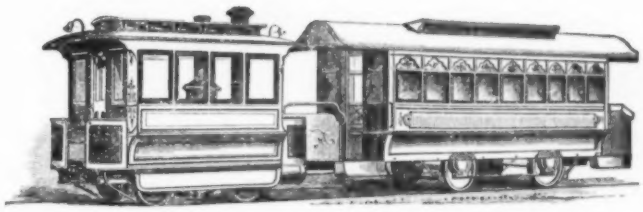

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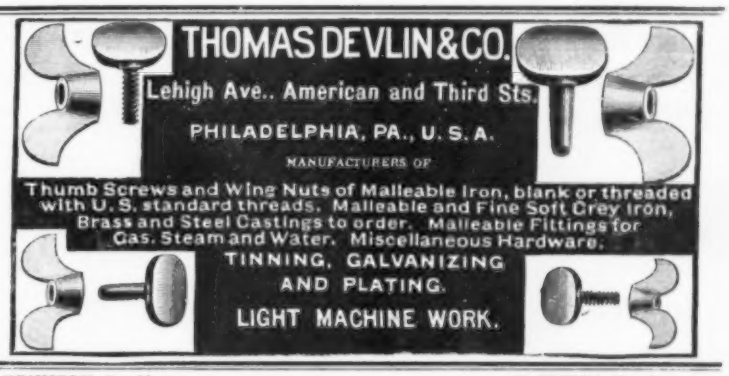

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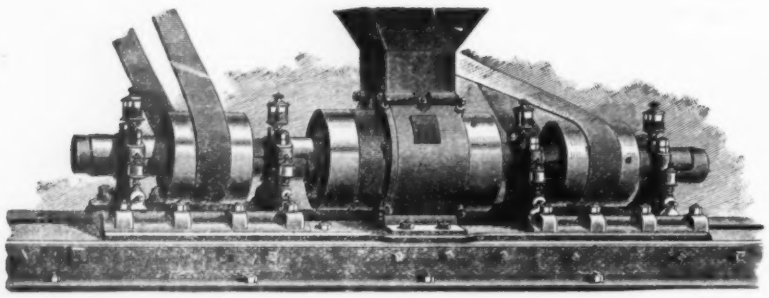

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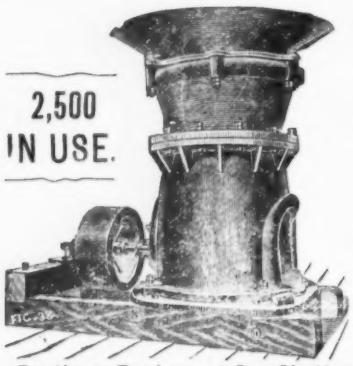

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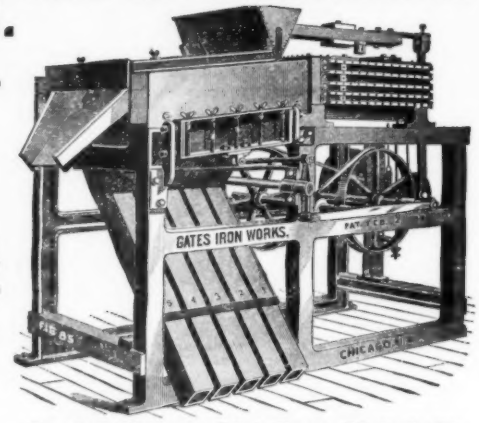

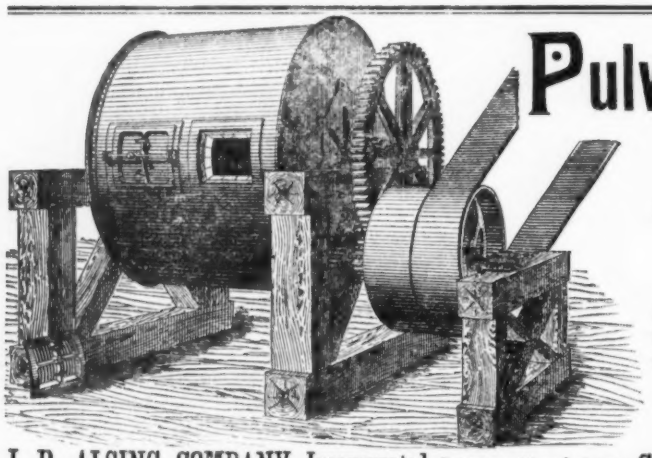

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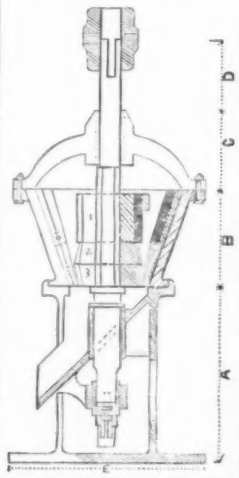

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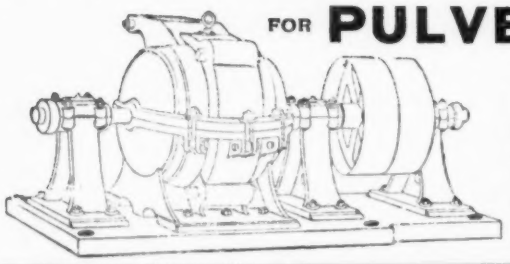

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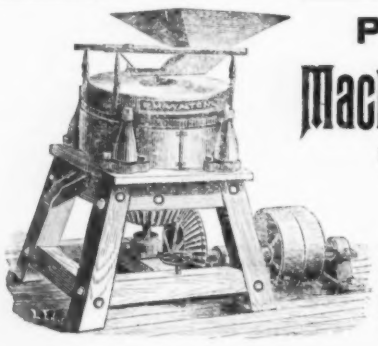

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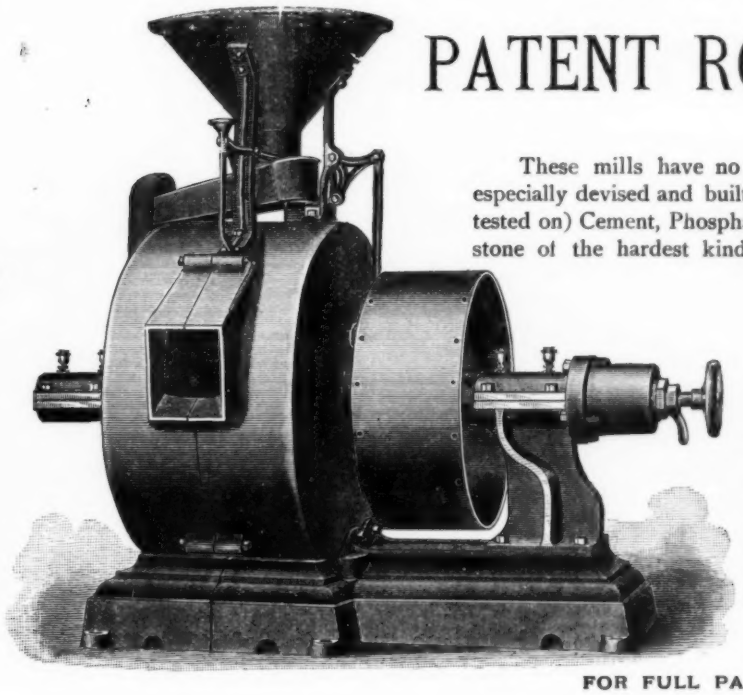

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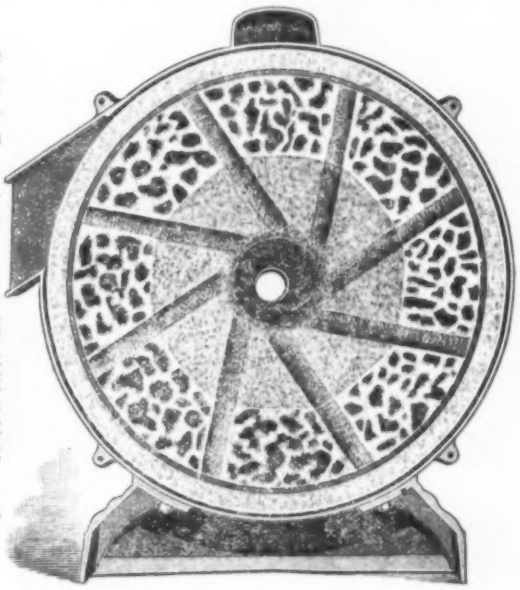

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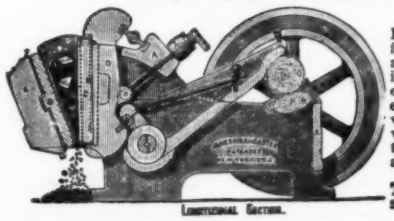

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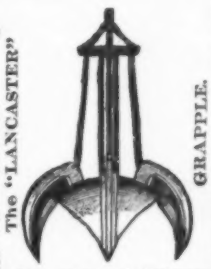

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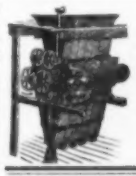

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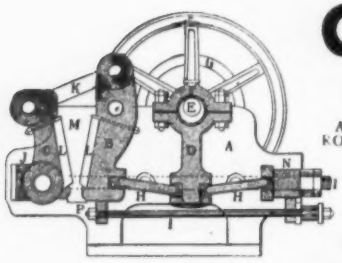

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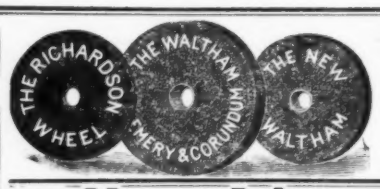

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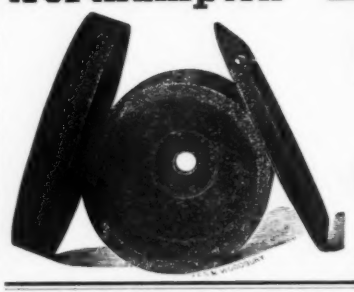

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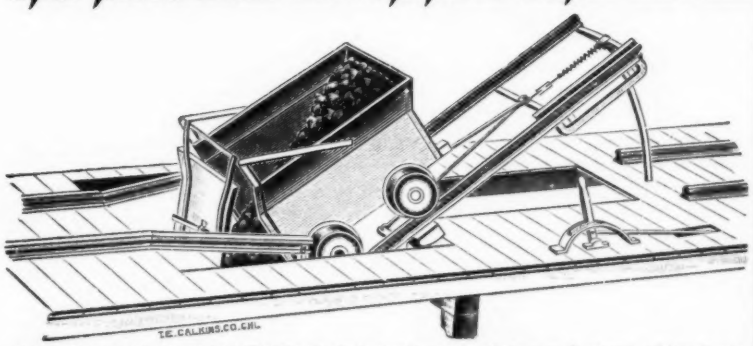

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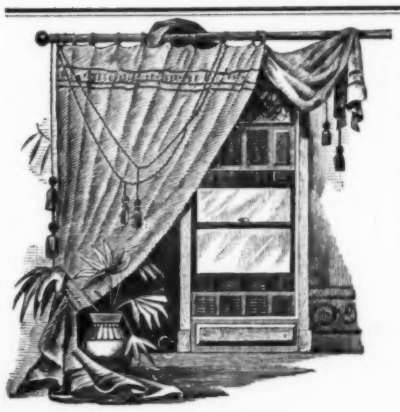

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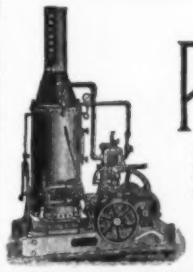

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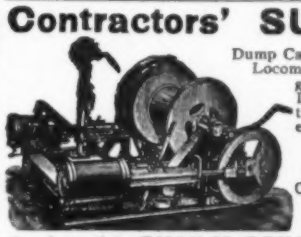

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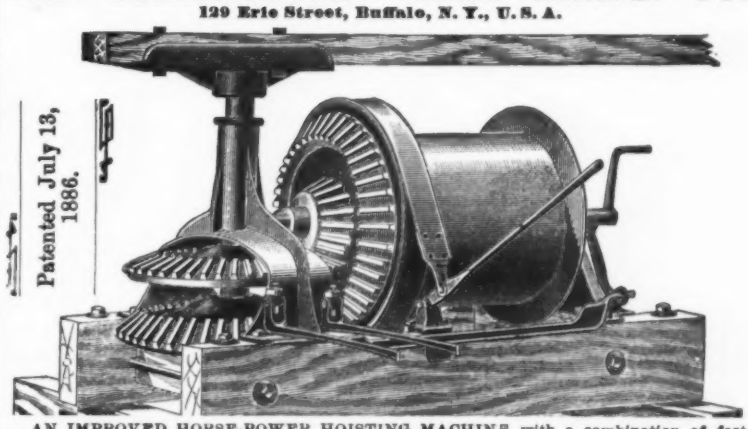

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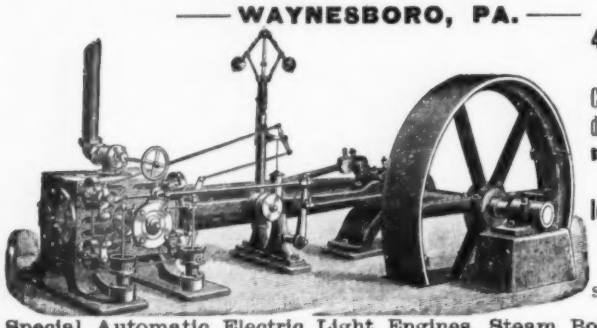

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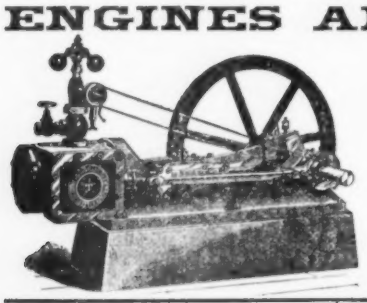

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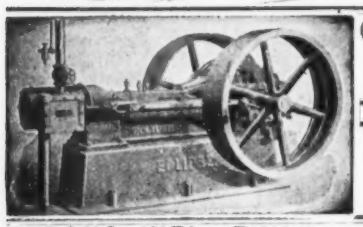

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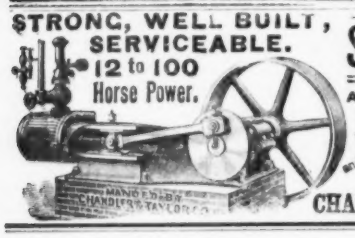

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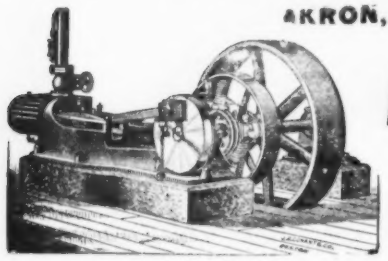

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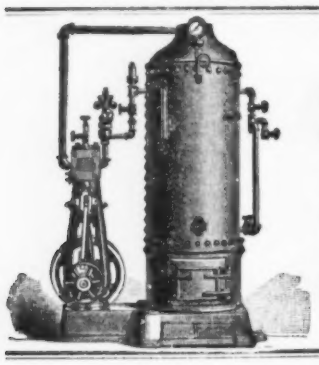

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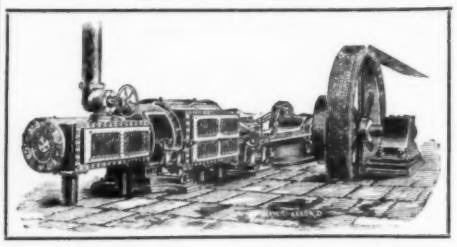

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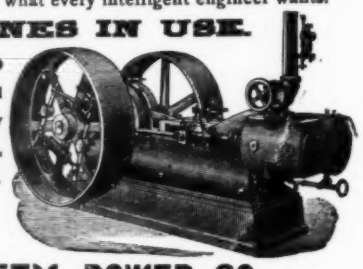

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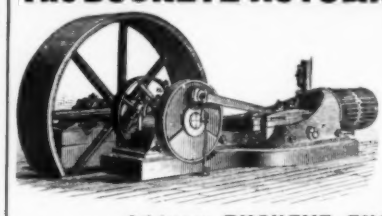

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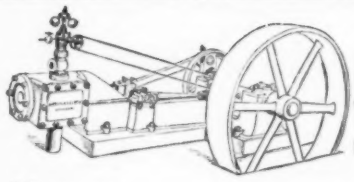

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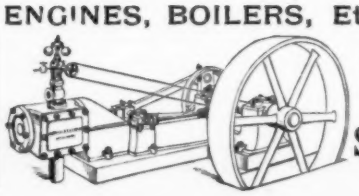

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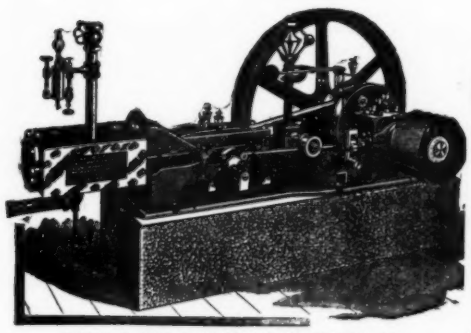

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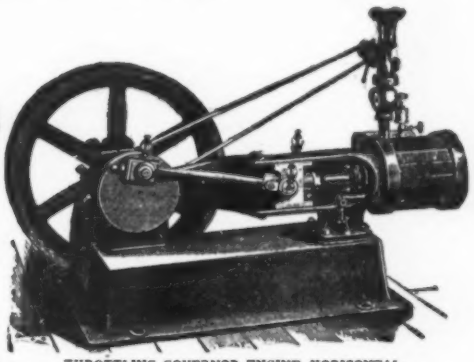

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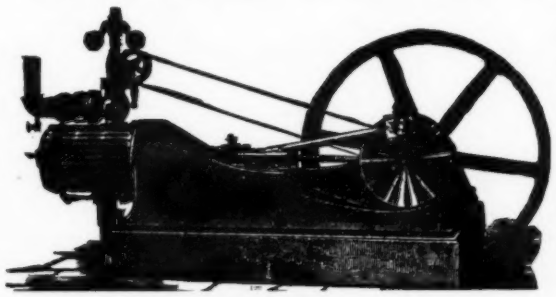

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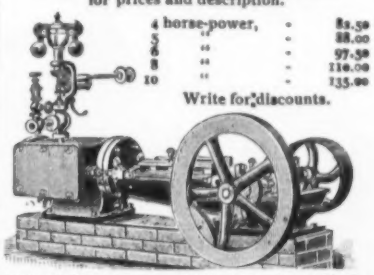

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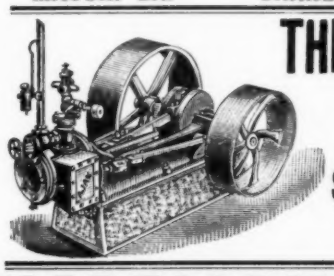

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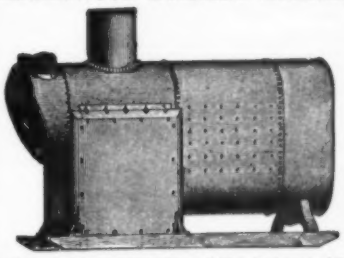

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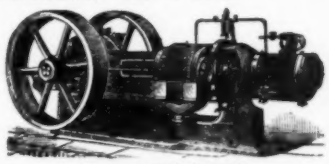

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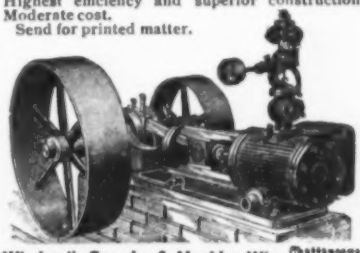

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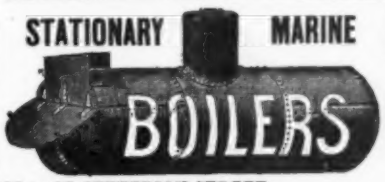

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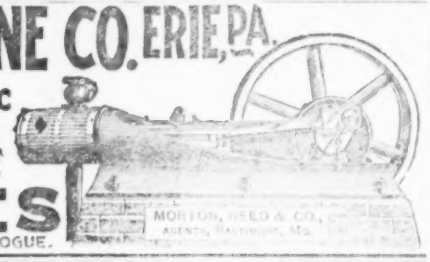

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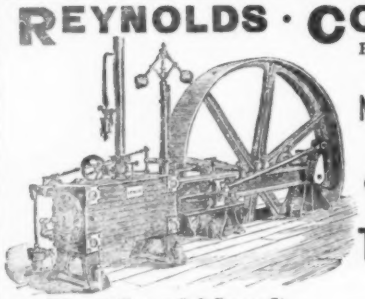

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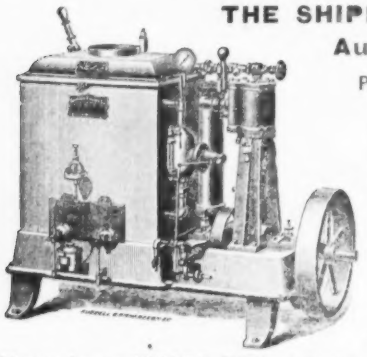

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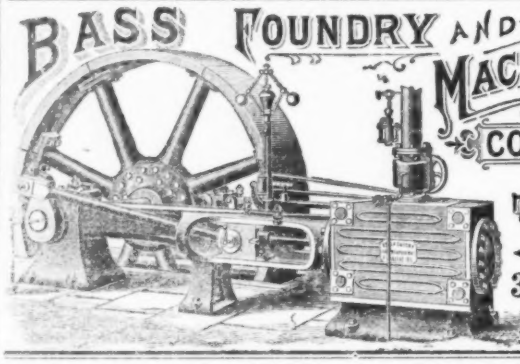

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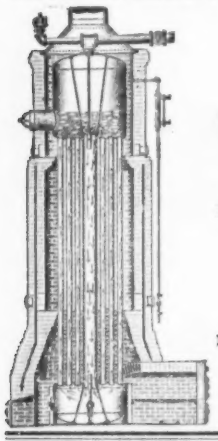

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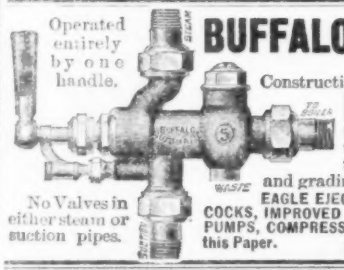

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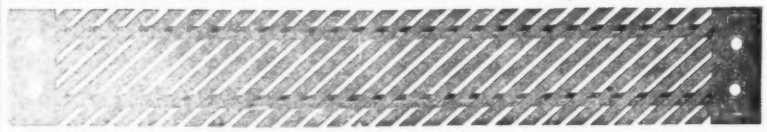

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A Scale Exterminator and Iron Preserver for marine and land purposes. Removes and prevents incrustation of salt and fresh water. Eliminates all deleterious matter. Prevents pitting and priming. Scientific tests and practical use commend it.

Used also in Breweries and Distilleries, and acts as a strong disinfectant.

It has been used for more than thirty years by all the large Atlantic Steamship Lines and great Railways of England.

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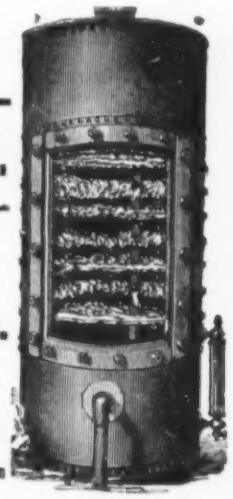
Stilwell's Patent

Lime Extracting **HEATER AND FILTER** Combined.



The Only Lime Extracting Heater That Will Prevent Scale in Steam Boilers.

Removing all impurities from the water before it enters the boiler.

Thoroughly Tested. Over 3,000 of Them in Daily Use.

This cut is a fac-simile of the appearance of the shelves of a No. 5 Heater at work on ordinary lime water, when the door was removed after the Heater had been running two weeks. ☞ Illustrated catalogue free.

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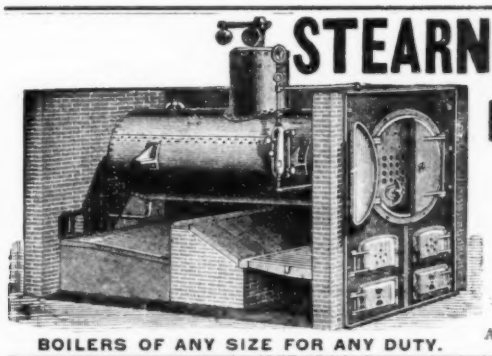

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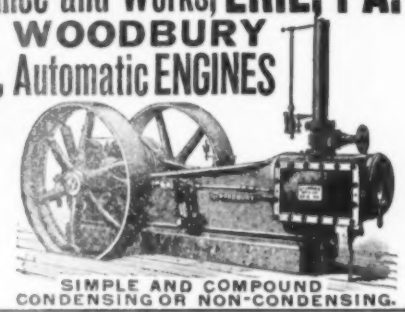

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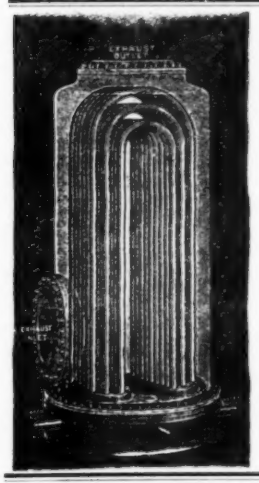

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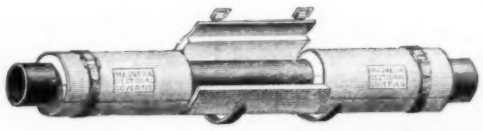

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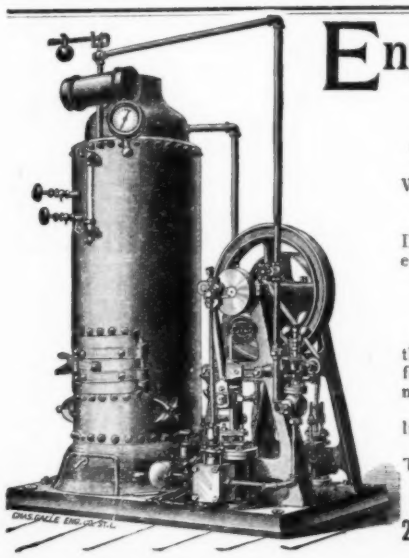

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Engine Detached from Boiler.
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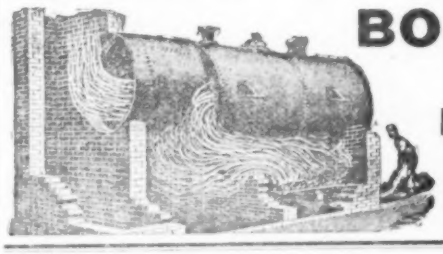

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BUILT BY THE

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We Hold the Patent On These Packings.
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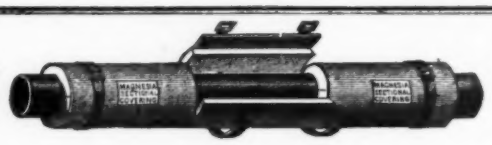
Absolutely  Fire-Proof.

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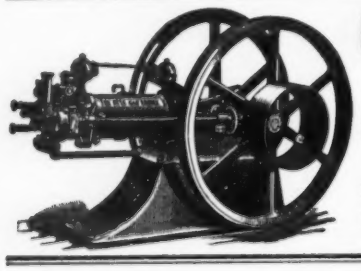

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[Name Patented 1889.]

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXII. No. 21. WEEKLY. | BALTIMORE, DECEMBER 23, 1892. | $4.00 A YEAR. SINGLE COPIES, 10 CENTS.

Growth of Manufacturing in the South.

In the tables presented below are grouped the principal figures of the manufacturing interests in Southern cities as shown by the bulletins now being issued by the census office. The figures for both the tenth and eleventh census are given for the purpose of comparison, and in this form they will serve as a convenient reference:

LITTLE ROCK, ARK.

	1880.	1890.
No. of establishments....	None.	93
Capital	"	$1,480,881
Hands employed.....	"	1,070
Wages paid.....	"	$387,415
Cost of materials used...	"	$1,154,675
Value of products.....	"	$2,454,831

MACON, GA.

	1880.	1890.
No. of establishments....	None.	161
Capital.....	"	$3,668,977
Hands employed.....	"	3,142
Wages paid.....	"	$1,085,716
Cost of materials used...	"	$2,534,144
Value of products.....	"	$4,974,914

PETERSBURG, VA.

	1880.	1890.
No. of establishments....	115	223
Capital	$1,755,415	$3,879,151
Hands employed.....	4,196	5,315
Wages paid.....	$602,749	$1,283,612
Cost of materials used...	$3,290,116	$4,200,936
Value of products.....	$4,643,015	$6,876,352

SAN ANTONIO, TEXAS.

	1880.	1890.
No. of establishments....	71	43
Capital.....	$310,050	$1,648,392
Hands employed.....	361	997
Wages paid.....	$137,781	$615,125
Cost of materials used..	$328,476	$831,185
Value of products.....	$642,412	$2,152,266

CHATTANOOGA, TENN.

	1880.	1890.
No. of establishments. ..	None.	283
Capital.	"	$6,673,515
Hands employed.....	"	5,129
Wages paid.....	"	$2,419,346
Cost of materials used..	"	$4,689,875
Value of products.....	"	$9,449,384

LEXINGTON, KY.

	1880.	1890.
No. of establishments....	None.	174
Capital.....	"	$1,411,880
Hands employed.....	"	1,427
Wages paid.....	"	$744,256
Cost of materials used...	"	$1,224,105
Value of products.....	"	$2,524,041

HOUSTON, TEXAS.

	1880.	1890.
No. of establishments. ..	None.	68
Capital.....	"	$2,437,282
Hands employed.....	"	1,994
Wages paid.....	"	$849,107
Cost of materials used...	"	$2,298,311
Value of products..... .	"	$3,948,502

BIRMINGHAM, ALA.

	1880.	1890.
No. of establishments ...	None.	223
Capital.....	"	$3,401,835
Hands employed.....	"	2,869
Wages paid.....	"	$1,523,378
Cost of materials used...	"	$2,803,443
Value of products.....	"	$5,239,969

Arrival of Florida Oranges in London.

[From our own Correspondent.]

LONDON, ENGLAND, December 10.

The first cargo of oranges for a European market left Fernandina on the morning of November 17th, with a fair prospect of good weather. The sea was about as calm as it gets in the morning, but before night all had changed. The wind blew pretty hard from the west, and the sea commenced to pile up, and frequently washed over the decks. Extra high hatches had been made to allow of their being left open in case of weather of this kind; however, it was necessary to keep them shut except on the lee side for the first six days, when the wind changed to the southwest. The west wind was a good thing for the fruit, as it blew cold, and the thermometer stood at 65° in the hold, and slowly fell to 62° on the fifth day. The following is the temperature of the hold during the passage over:

1st day	65°	9th day	65°
2d day	64°	10th day	64°
3d day	63°	11th day	64°
4th day	63°	12th day	58°
5th day	62°	13th day	59°
6th day	64°	14th day	56°
7th day	68°	15th day	54°
8th day	68°		

The rise of temperature on the seventh day was due to a south wind lasting two days. The sea ran very high and the waves choppy, which made it uncomfortable for all on board, so that during the whole trip not a meal was eaten without racks on the table. The wind, however, was favorable for the course of the ship, so that much better time was made than calculated, the time from Fernandina to the London docks being fifteen and a-half days. On arriving we found no one looking for us, as the ship was not expected till two days later, so she anchored off Fresh wharf for the night. There was at this time one ship already discharging oranges, and when the fog cleared enough, two more were anchored close by which had oranges aboard. As near as we could ascertain from the fruit brokers, there were in warehouses and ships there about 60,000 cases of Valencia, Malaga, Lisbon, Palermo and Messina oranges, besides the Florida fruit unsold, to say nothing of that in warehouses sold but not taken out. These cases hold nearly double the amount of oranges that a Florida box does, ranging in number from 420 to 1,000 per case. All of the fruit brokers whom we met say that they had never seen so many oranges on the London market at one time, and prices, of course, were away down. The outlook for the Florida grower seemed bad indeed. There would be nothing to fear from these other oranges if the English taste had been educated to the Florida fruit, but comparatively few have been heretofore sold here, many of the merchants having never handled a box. On the morning after the arrival of the ship it was found impossible to discharge at Fresh wharf owing to the storerooms being full, therefore the vessel was sent to the London and Indian docks. Being late Saturday, nothing towards discharging was done till Monday.

On examining the cargo in the ship it was found that the fruit had kept in fairly good condition, some being entirely sound, while others were from 5 to 50 per cent. rot, the latter, however, being in small proportion. There is a good deal of interest manifested in the shipment, and I feel confident that when the Florida oranges are offered for sale they will bring twice what the other kinds are bringing.

I spent some time in watching the unloading of oranges from other vessels, and must say it is decidedly slow, each case being carried on the head of a stout longshoreman from the vessel to the warehouse. As the cases come out they are examined and marked according to condition. If sound C; if a little rot CC; little more rot ×C; bad ×C, and very bad ×C.

On Thursday a large portion of the oranges were sold, and while not bringing as high a price as we could have wished for, still did remarkably well, especially when considering the large stock of other oranges in. First-class boxes in good condition brought from $2.45 to $3.50 per box, while damaged ones sold for between 50 cents and $1.75 per box, depending upon how bad they were. The average of the sale netted $2.26 per box. As there are about 175 oranges in a box, and the Spanish and other countries have nearly 420 in a box and sold for $1.75, it can readily be seen that our Florida fruit had the preference. So well pleased are the consignees that there is no doubt but that a regular line of steamers will be inaugurated to run between Fernandina and Liverpool, London and European markets. It is thought that it might be possible to dispose of from 100,000 to 300,000 boxes at these places during the coming year, as our oranges will take the lead of those from any other country in these markets. E. O. PAINTER.

The Farmers' Congress Meets Next in Savannah.

By Col. L. W. Avery.

At the recent National Farmers' Congress held in Lincoln, Neb., Capt. D. G. Purse, president of the Savannah Board of Trade, as vice-president presided over the convention in the absence of the president.

Captain Purse presided over the body with such acceptability that when he invited the convention to hold its next meeting in his beautiful and hospitable city the invitation was promptly accepted in compliment to him, and next year the able and distinguished representatives of the nation's agriculture will have a chance to enjoy the very finest display of typical Southern hospitality.

Captain Purse did a good thing for the city in this matter, in bringing to these splendid Americans of the great North and Northwest the magnificent attractions and solid advantages of the Forest City. They are indeed well worthy of being seen, and the torrent of letters that he is receiving from the delegates shows how gratifying they are to have the opportunity to see this chief seaport of the South Atlantic coast, one of the loveliest cities of the American continent, and one of the coming commercial metropolis of the United States.

These gentlemen will have a chance also to verify the correctness of these letters, truthfully descriptive of Savannah.

They will find many things meriting consideration and remembrance. They will see Christian spirit, intellectual culture, material progress, love of the Union, burial of war memories, national brotherhood, harmony between the blacks and whites, devotion to law and order, consecration to liberty, patriotic sentiment, respect for colored rights and privileges, toleration in politics, purity in homes, integrity in business, breadth of public spirit, and every other American characteristic and national quality.

Some striking facts will be riveted in their minds:

That Savannah leads the world's naval stores trade.

That Savannah is second in American cotton traffic.

That Savannah is the third export mart of this continent.

That Savannah is the ocean gateway between the North and West.

That Savannah's four ocean steamship lines to the chief Northern seaports, connecting with her shortest railways to the chief trade marts of the West for grain and meat, make the best system of transportation in the South, and the equal of any in the country.

That Savannah is nearer than New York to the greatest markets of the West, like Kansas City, San Francisco, St. Louis, etc.

That Savannah's superb healthfulness is shown in her uncommonly low mortality.

That Savannah's system of artesian wells gives her the purest water in the world, one of the muniments of health.

That Savannah has the finest art gallery in the South.

That Savannah has a city electric car system the equal of any in the Union in proportion.

That Savannah's environment of suburbs is unsurpassed in America.

That Savannah is the germ of the State of Georgia and rich in her history.

That Savannah is one of the most beautiful cities in the world.

That Savannah is the leading truck and garden region of the South, and furnishes early vegetables to the North, and invites the gardeners of the world to settle.

That Savannah is a leading melon, lumber, rice, oyster and fish market in the entire South.

AN independent clearing-house is about to be established in Baltimore, and a paper is now in circulation among the bank presidents pledging the signers to support the movement to establish one similar to those in other large cities. The clearances at present are made at the National Union Bank, and those favoring the new movement say that they think the business of the clearing-house should be entirely separated from the interests of any particular bank. If the movement is successful it is said that the clearing-house will occupy quarters under the Farmers and Planters' National Bank now occupied by the Baltimore Guarantee & Trust Co.

LAST week the tobacco warehouses at Winston, N. C., had the largest breaks since the opening of the new tobacco year, October 1. About 325 wagons were in, and besides this a large amount of leaf was received by rail. The four warehouses sold over 165,000 pounds in one day. Thus far the quality of the tobacco offered has been rather inferior, but prices have been remarkably good notwithstanding this fact.

SOUTHERN OUTLOOK AS VIEWED BY BUSINESS MEN.

What Leading Merchants Think of the Prospects for Trade During the Coming Year.

We give below some letters which have been received from leading business houses in the South relative to the business prospects. These cover various branches of business in Kentucky and Tennessee, and are from men who have every opportunity to be thoroughly familiar with the business condition of their section of the country, and as such they are worthy of careful attention and consideration. Coming from so many different sources and representing such varied commercial interests, these letters are convincing as to the general outlook throughout the South:

Outlook Never Better.

COVINGTON, KY., November 21.

The trade in these parts seems to be good trade, but seems to be overdone—too many in business. The outlook was never better. The worst feature of the year has been short crop in some things, but we think the prices that the farmers are getting will overcome the shortness.

GEO. W. HILL & CO.,
Grocers and Commission Merchants.

More Corn Than Usual.

HENDERSON, KY., November 22.

Business generally in the South is good, as far as we are able to judge from our correspondence, though it is very dull in our particular line on account of the larger crop corn in the South than usual. We look to see no great improvements in the grain business South until the local supplies of corn are about exhausted, which will be about the first of March, 1893.

HENDERSON HOMINY MILLS.

Heavy Trade all the Year.

HENDERSON, KY., November 21.

We are pleased to say that at present business is all that we could desire, as we have just as much business as we can manage, and have had a very heavy trade during all of this year. As for the future, we feel safe in saying that the prospects are very good in our line, as the car works are writing us saying they would want lumber by the million feet. Indeed, we see nothing in the way, and feel certain our trade will be very good during the coming year.

JOSEPH CLORE'S SONS,
Saw and Planing Mills.

Large Business and Prompt Collections.

LOUISVILLE, KY., November 21.

Our business has never been as large before, and our collections never more prompt. Our section of the country is improving rapidly, and failures are fewer and smaller than last year. We can see nothing in the outlook that promises anything but increasing prosperity for our section, and, in fact, for the whole country.

J. T. COOPER,
Union Cement & Lime Co.

A Thoughtful View of Agricultural Conditions.

LOUISVILLE, KY., November 25.

Our trade is mostly in the Southern States, and conditions which affect its interest for better or worse are very apparent on the profit or loss side of our ledger at the close of the season. Our product is almost exclusively used by the farming community. If crops are good in the South or prices for farm products range high, the demand for our goods correspondingly increases, and when the reverse is the case farmers and planters endeavor to get along with what they have, and the demand for implements slackens. Our summer trade was as good as we expected, but the fall demand was smaller than we anticipated. Unfortunately, cotton is in a measure still king in the South, and when the king is financially bilious Southern trade turns yellow.

We believe the low price of cotton of late has been a good thing for the Southern farmers. The tenacious love for that plant, which has been their birthright for over half a century, and the idea that Southern soil was adapted for nothing else, have received a check, and just as soon as the planter turns his attention to more corn, more oats, more wheat, more fruit and vegetables, more cattle and hogs and less cotton, then will he begin to crawl out from under the crop mortgage yoke that has been pressing out his substance and vitiating his credit so many years. It may be true that the impending terror of the so-called "Force Bill" has engendered conservatism among a certain class of Southern buyers, and this question having been summarily disposed of, their courage will take new root; but our experience has been, in our line of business, that demand governs the volume of trade, politics notwithstanding.

Our expectations of the future are hopeful. With the eyes of the Southern planter turned from cotton to the cereals, and the fact dawning upon him that he can just as well raise his own food supplies as to mortgage his cotton crop to get them, his attention is also directed to the best means of planting and harvesting his new crops. The experience of his Northern brother will teach him that improved agricultural implements are his mainstay and his avenue of escape from unreliable colored labor. With a bounty for the sugar planter, the price of cotton advancing and the farmer raising more and more of his own food, we have faith in the outlook for Southern trade in the future.

BRENNAN & CO. S. W. AGL. WORKS,
W. G. Munn, Sec. and Treas.

Jobbers Carrying Light Stocks.

LOUISVILLE, KY., November 23.

We think the outlook for business for the year of 1893 in our line is very good. We manufacture cast iron soil-pipe and fittings, and have had a very successful season. We are satisfied that the jobbing trade will carry over but very little stock next year, and the demand for this reason will be very good next spring. Prices in our line have gone lower this year than ever before, but are now stiffening up, and we expect to see a considerable advance by next spring.

THE AHRENS & OTT MANUFACTURING CO.,
Theo. Ahrens, General Manager.

Prospects Fair to Good.

LOUISVILLE, KY., November 21.

Business is gradually recovering after twelve or eighteen months of considerable depression in the cotton States. Grain districts and tobacco districts have been and are doing very well. There is a marked absence of speculation and a distinct feeling of conservatism all along the line.

The advance in cotton is toning up the cotton States. We consider the prospects fair to good for a steady gain in values and in volume of trade of Southern commodities, real estate included.

B. F. AVERY & SONS,
Agricultural Implements.

Convictions of Prosperity Hitherto Unknown.

LOUISVILLE, KY., December 10.

Having just returned from a careful revision of the section of Kentucky embraced in the counties of Grayson, Edmonson, Warren, Logan, Christian, Ohio, Hancock and Meade, I find the business conditions healthy. Taken as a whole, the outlook is good. Trade volumes are increasing. Crops have been above the average, and farmers generally satisfied with both past season's work and outlook for coming crops. Since election and the settling of national questions merchants in sections above named express convictions of conditions of solid prosperity hitherto unknown, and report collections fair and the holiday trade better than for years; in fact, this whole section is decidedly in sounder business condition than for two years past.

E. D. JUNKIN.

A General Revival Looked For.

BRISTOL, TENN., November 23.

My experience, as well as observation, with reference to the commercial business of the South is that dealers have been very conservative for the last year, and as a result but few failures of much importance. Personally, I have had no losses in the South for more than twelve months, and feel comparatively safe on bills not yet due. The trade just at this time is rather quiet, but I can see already a much better feeling, and after the new year I look for a general revival in every department of business. Already Eastern business men are looking out for suitable locations for new enterprises. I think I can safely say that the outlook for 1893 is good. Liquidation has been going on for two years, and what debts have not been paid will be pretty well cleared up this winter.

A. D. REYNOLDS,
Tobacco Manufacturer.

Confidence That Gives Encouragement.

CHATTANOOGA, TENN., November 23.

Basing an opinion upon our relations and experience with the Southern trade, we believe the outlook for 1893 is good. Every indication points to that condition of trade. Now that the election is over and the allurements of politics have ceased, men will devote their energies to business rather than discussing the questions of how to run the government. There appears to be an upward tendency in the price of cotton. This can equally as well be said in regard to most manufactured products. The relations of the manufacturer and the farmer are mutual. When all products have an upward tendency, in the case of the manufacturer it stimulates business, and in the case of the farmer it encourages him to raise more than necessary to meet the immediate demands of the home.

When there is a surplus and the commodities can be exchanged, the result necessarily brings into use more money. This stimulates business and creates confidence. With the abundance of money waiting investments in some sections of the country, and with the inducements the South offers for investments, and especially in the manufacturing line, it is safe to conclude that the natural laws of supply and demand will draw capital South, and with good crops and the confidence of her people it is safe to predict for the Southern States prosperity in all lines of business adapted to this section during the near future.

Our trade covers the entire Southern States, and our experience with the trade this season has been very satisfactory. Trade has been up to the usual standard and collections are unusually good, and while merchants have bought goods carefully, yet there appears to be a confidence that gives encouragement both to the merchant and manufacturer.

THE LOOMIS & HART MFG. CO.,
A. J. Gahagan, Treasurer,
Lumber and Furniture.

On the Verge of a Very Prosperous Season.

CHATTANOOGA, TENN., November 25.

At present we are running at our fullest capacity, selling all the cement we can make, and have orders on hand running far into next year. We have been compelled to increase our capacity in order to keep pace with the large demands being made on us, and from the present outlook it would seem that we are going to experience a very prosperous year. As to the condition of trade in other lines, there seems to be an increase of trade all around. Merchants are laying in heavy stocks and report sales very good for this time of the year. The advance in iron and cotton is already having a most salutary effect, and all in all it looks as if we were on the verge of a very prosperous season.

HOWARD HYDRAULIC CEMENT CO.,
W. P. D. Moross, Secretary.

A Larger Cash Trade.

JACKSON, TENN., November 25.

We find trade better now at a good many points in this section than it was last year. We find a larger cash trade than last year. While our cotton crop is cut off fully one-half, the advance in price has helped out the farming class wonderfully.

As to the manufacturing interests, they are as good or better than they were last year.

Everybody is looking for a brighter future owing to the change in the administration.

A. C. WHITE & CO.,
Cotton.

East Tennessee Looking Up.

JOHNSON CITY, TENN., November 25.

We are of the opinion that trade is better now than thirty days ago. We regard money much easier now than it was sixty days ago. Our crops were very fine this season. Wheat has been very dull at sixty-five to seventy cents per bushel, but there is now a good demand, and prices are better now. We think the day is not far distant when things in East Tennessee will look up very much. There is a good, healthy feeling in this country, and we will be very much disappointed if they do not come at once. Real estate is looking up, and we think at no distant day we will get much better prices.

HUNTER & BROWN.

Merchants Owe Less than Last Year.

KNOXVILLE, TENN., November 25.

Consequent on the stagnation in the iron industry and the low price of that product, coupled with the low price of cotton, this section of the country has experienced two years of depression. The present tendencies and the outlook for the future are very encouraging, we think. In our opinion the cotton crop this season will be produced at a much less cost than ever before, and is commanding a much higher price. The iron industry has revived and prices stiffened a little. Another important fact is that the merchants throughout the South have been very conservative, and have curtailed their business as far as possible, and we believe that they owe less money and are in a better condition than a year ago. All this will have a beneficial effect on our section, increasing materially the price of our stock and so forth. We look for a larger volume of business.

MCTEERS, PAYNE, HOOD & CO.,
Wholesale Clothing.

Money Is Being Turned Loose.

KNOXVILLE, TENN., November 28.

Yours of 21st received and contents noted. The present condition of trade is better than it has been at any time for a year past, and the outlook for the future is decidedly flattering.

Within the past month money is being turned loose and enterprises for the future invested in. The feeling of restored confidence is not local, but extends through the entire section in which we do business, viz., Tennessee, North Carolina, Virginia, Kentucky, Georgia and Alabama.

M. L. ROSS & CO.

Outlook Is Bright in All Lines.

MEMPHIS, TENN., November 24.

Cotton and lumber, the leading productions of the territory contiguous to this city, both ruling low for the past year, have caused trade to be anything but satisfac-

tory. A shrinkage in volume and difficulty in collections have been the result. The lumber market for the few months past has been showing a gradual improvement. The cotton crop is short, but the price is rapidly advancing, which at this particular time gives the full benefit thereof to the producer. The outlook, therefore, in all lines is bright, and next year promises to be a good one for all lines.

DAN SHEA & CO.,
Eagle Boiler Works.

Signs Are Really Hopeful.

NASHVILLE, TENN., November 28.

There is a very well-defined expectation of a marked improvement in trade throughout the South, based upon the increased price of cotton as an immediate cause, and more remotely the general confidence inspired by the result of the recent national election. This is from a purely business standpoint, though seemingly flavored with politics. The signs are really hopeful for a speedy revival of business and for permanent prosperity. AMERICAN PAPER CO.

Improvement Is Now Manifest.

NASHVILLE, TENN., November 25.

We feel assured of the fact that we have a prosperous year just ahead of us; in fact, we are already beginning to feel its effects. We are closely connected with the iron interests tributary to us, and this article has been gradually strengthening for the last few months, and most of our furnaces are sold ahead, with continued large demand. The advance in cotton has also contributed greatly to the present prosperity in the South, and although the amount of cotton carried over from last season is small, yet this advance adds many millions of dollars to the Southern planters' pockets. Our requests for extensions of credit are less frequent, and we find our Southern friends are more rapidly meeting their obligations, and, with the political situation satisfactory to the Southern people, we think that we cannot be mistaken in regard to the prospects for the future.

PHILLIPS, BAILEY & CO.,
Wholesale Grocers.

Progress of the World's Fair.

[From our own Correspondent.]

CHICAGO, ILL., December 19.

The South will take part in the World's Fair on a very generous scale, and its participation is significant from every point of view. That the greatness of the exposition is properly appreciated in the Southern States is evident from the liberality, enthusiasm and energy manifested in the preparation of lavish exhibits. It is a question if a very large proportion of the people have even a vague notion of the present material prosperity of the South or any adequate conception of its advancement within the past few years. The exhibits representing some of its industries and resources will present it in an entirely new light to many who will attend the fair, and this revelation will be productive of far-reaching results. It requires no gift of prophecy to be able to predict that a proper appreciation of Southern development will lead to the investment of capital in Southern enterprises. It is apparent also that manufacturers will realize as never before the possibilities of a Southern market for their goods. Whatever other effects may follow, these results must inevitably be produced, and to the mutual advantage of all sections of the country.

* * *

A Chicagoan is always asked when on his travels if the hotel-keepers propose to fleece the strangers who will congregate in the city next year. An answer to the query may not be without interest here, and in a general way it may be remarked as a reply that these proprietors have a very keen sense of appreciation of the opportunity that will be presented to them, and unless all signs fail they propose to take advantage of it to the very fullest extent. They have not determined just yet how high it will be practicable to raise their rates. The manager of a fashionable hotel stated to the writer that he was unable to fix rates for next summer until he had conferred with other proprietors. This appears to be ominous, although since that time a number of hotel-keepers have publicly given assurance that no consultation was to take place. There is fortunately another side to the matter. Extremely few persons, even in Chicago, realize how many new hotel projects are under way or how vast is the army of persons who propose to engage in the business of entertaining strangers. In addition to the great number of hotels now building, many office buildings will be converted into temporary hostelries, while houses by the hundreds will be opened for the harboring of fair attendants. There is consequently to be plenty of competition, which will tend to keep rates down to reasonable figures. When it is added that the official department of public comfort proposes to assign quarters to strangers, it will be seen that the prospect is not as bad as it seems at first sight. No one need be deterred from attending the fair by fear of outrageous rates for board. Chicago has a reputation to sustain in this respect, and will see to it that its visitors are not swindled.

* * *

One of the problems that must be solved is that of the transportation to the fair grounds. Jackson Park is situated about seven miles from the city. It is now reached by the cable lines of the Chicago City Railway Co., by the trains of the Illinois Central Railroad and steamers on Lake Michigan. The pessimistic have figured out that means of travel will be utterly inadequate to the demands upon them. They were tested at the time of the dedicatory exercises and were certainly found lacking. Dr. Depew, who looked into the matter at that time, remarked that it seemed to him extremely doubtful if the people could be carried away from the grounds comfortably, although he thought no difficulty would be experienced in transporting them thither. This is, however, but another matter concerning which it is needless to borrow trouble. Although the transportation companies are not yet in a position to handle unusual crowds, they are engaged upon plans that will enable them to do so next summer. The cable company will be able to carry a million passengers daily; the elevated road will then run to the grounds; the Illinois Central's tracks will be elevated and its new rolling stock will be in readiness, and very large additions will be made to the fleet of World's Fair steamers.

There will be two means of comparatively rapid transit at the grounds, the intra-mural electric railway and the fleet of electric launches plying in the lagoon. The former is an elevated railway about five miles in length, and, as it will be operated by electricity, it will constitute an exhibit of no little interest. Its successful operation will doubtless lead to the adoption of the electric motor on more than one elevated railway. The electric launches deriving their motive power from storage batteries will be novelties to almost every attendant at the fair. Noiseless and smokeless, they are ideal craft. Within the buildings visitors who tire of walking can hire wheel-chairs, which will be pushed about by attendants, who will point out objects of interest. Students from Western colleges have been already engaged by the hundreds for this interesting service.

* * *

The fair is to have a tower after all, not one that will rival the famous Eiffel, it is true, but still a tower of very respectable proportions. It will be built on a plan wholly different from that of the crowning feature of the Paris Exposition. It will be 560 feet in height and 200 feet in diameter. A track will wind about the structure, and up this grade electric cars will travel. At the top will be located an observatory, from which the visitor may overlook the grounds. The tower is to be built of iron and steel, and the projectors are figuring on a patronage of 100,000 persons each day.

* * *

The horticultural building contains at the present time more objects of interest than any other structure on the grounds. The arrangement of exhibits is progressing with considerable rapidity. The attendants are able to point out the largest palm tree in cultivation in the world, as well as the most gigantic tree ferne from Australia. Of the exhibits in this department perhaps the most interesting is that from Japan, which is both novel and complete. One of the curious things is a dwarf tree said to be over 300 years old. The little shrub with its twisted trunk, presenting every evidence of extreme age, is about two feet in height. The cases in which the plants were brought from Japan are curiously and wonderously well made. The government apparently wishes to make it evident, even on matters of detail, that it believed in performing work as well as it could be done. Some of the packing cases were put together and almost as handsomely finished as pianos.

* * *

The Japanese workmen are laboring vigorously on the temple which they are building on the wooded island. Conspicuous by their uniform or livery with lettering about the collar and huge crosses on the back, their progress is eagerly watched by the visitors. They work with curiously fashioned tools, douple-edged saws and tiny planes, but in the matter of skill and rapidity of movement they have little to learn from the American carpenters at work in buildings nearby.

* * *

The monthly report of the auditor, which has just been made out, presents some interesting figures. Up to the present time the total disbursements have aggregated $12,784,322. For contract work at Jackson Park there has been already paid about $8,500,000. During November the expenses were approximately $1,400,000, of which sum all but $200,000 was chargeable to the construction account. Last month there were 3,356 persons named in the payroll, whose compensation aggregated $251,474, or an average of about $75 for each employe. That the fair grounds are already attracting a considerable number of visitors is evident from the fact that the gate receipts up to the close of last month amounted to over $174,000. As visitors are charged at present twenty-five cents for admission, this is quite a respectable showing. The number of those equipped with passes is legion.

* * *

A great deal of fault has been found lately by persons who intend to exhibit in the manufactures building because space has not been allotted. The chief of the department has been unable to act, owing to the fact that the authorities were considering the idea of locating the educational exhibit in the building. They have finally determined to erect a special educational building, and the allotments of space will soon be generally known. The delay has caused a vast amount of inconvenience, as applicants could not ascertain much information beyond the disagreeable news that they could not, in all probability, secure more than one-quarter the room that they wished.

* * *

The fisheries building is open for the inspection of visitors, and the glass tanks are filled with water, but they are yet without occupants. The largest tank is fifty-two feet long and ten feet in width, and will hold 27,000 gallons of water. Rhode Island will make the largest exhibit in this building, and North Carolina will hold the second place.

WORLD'S FAIR NOTES.

What Is Being Done Towards Representing the South at Chicago.

TENNESSEE.

Col. Robert Gates, secretary of the Memphis Commercial Association, has sent out a circular letter to commercial associations in the cities of Tennessee requesting them to send delegates to a conference to be held at Nashville on December 20 to formulate and recommend to the general assembly a measure providing for the State's representation at Chicago next year. Considerable interest is manifested in Knoxville, Chattanooga and other places in the conference, and there is yet hope that Tennessee will not be left out of the exposition.

GEORGIA.

Governor Northen and the committee who recently visited the exposition grounds at Chicago have returned very enthusiastic over the World's Fair and thoroughly aroused to the necessity of having Georgia represented there in some manner. An effort will be made by the committee to have the general assembly appropriate $50,000 towards making a State exhibit. It has been about decided by the manufacturers and business men of Augusta that if the State makes no exhibit they will erect a small building and place therein a handsome display of Augusta's industries and resources. This, however, will go along with the State exhibit if one is made. It is not probable that Georgia will have a State building.

FLORIDA.

The State building at Chicago has been completed, with the exception of a few finishing touches, and is now awaiting the placing of exhibits. Commissioner Arthur C. Jackson has returned to Florida to make an appeal to the people for an adequate exhibit to place within the building.

NORTH CAROLINA.

North Carolina applied for 20,000 square feet of space at the World's Fair, but the managers of the fair have decided that they can allow only one-third of that quantity to be used. The exhibit will, therefore, be very compact, and only choice specimens will be placed in it. At the last meeting of the board of managers in Raleigh the work of arrangements was reviewed, and it was found that a complete and splendid exhibit of North Carolina's resources would await the visitors at the exposition. The $25,000 which the last legislature appropriated is now found to be available and will be used.

TEXAS.

The Texas building is now under construction, and it is expected will be completed within sixty days. It will be made doubly attractive by inside decorations similar to those of the famous Spring Palace of Fort Worth.

THE annual meeting of the Shenandoah Valley Agricultural Society was held in Winchester, Va., recently. Capt. J. K. McCann was elected president. The vice-presidents elected were Capt. John Glatz, Fred M. H. Reardon, of Clarke; John Boyd, of Berkely; A. R. Unger, of Morgan; Capt. John R. Rust, of Warren; Frank Manning, of Jefferson; J. B. Beverly, of Loudoun; H. M. Clagett, of Hardy, and Loring Cover, of Hampshire. Directors—J. M. Long, J. H. Burton, E. C. Jordan and B. W. Baker, of Frederick county; S. H. Hansborough, Winchester; T. C. Chamblain, George Thomas, Clarke; J. R. Harmer, M. J. Hardesty, C. A. Byers, of Frederick. Secretary, E. G. Hollis, of Winchester; treasurer, P. C. Gore, of Frederick.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on page 430.]

A Short Review of Great Britain's Cotton Industry.

LONDON, ENGLAND, December 10.

Recently the cotton industry has been brought into very great prominence by reason of the strike which has been in progress among the operatives employed in the factories of the United Kingdom. At the beginning of the year that is now drawing to a close the coal-mining industry was the most conspicuous in the minds of the majority of manufacturing communities in that country, in consequence of the prolonged strike that occurred in the Great Northern coal field. The question upon which both these movements have turned has been that of wages, and in both apparently the initiative demand, which has decided the action of a discontinuance of work, has come from the men. Of course, there is not a very great parallelism between the two cases, but it is an index of the progress that has been made of late years in the power of combination and in the want of mutual recognition on the part of one side of the rights of the other. This is evident not only in the United Kingdom, but also in our own country. At this period, when the cotton operatives have again shown their determination not to accede to any requests that may be made of them unless a reciprocal concession of equal value or benefit is granted to them, a short review of the past progress of the cotton industry in the United Kingdom will not be without interest.

Whatever was the condition of the worker in the cotton mills some years ago, it is certain that today he is one of the most prosperous members of the community of workers. His wages are good, and their purchasing power, compared with, say, twenty-five years ago, is greater. Modern improvements, both in the factories themselves and in the machinery employed, have tended to make his lot a much more healthy and enjoyable one. The hours during which he is employed have been greatly lessened, due in a great degree to the advanced facilities of manufacture. This latter phase of the question seems to be the cause of difficulty at the present time. Stocks have become so augmented through excessive production, which has apparently been caused by the hours of employment being more than sufficient to keep well abreast of the demand, that a fall in price has resulted, and the masters, therefore, desire to reduce their wages account as much as possible. The operatives, on the other hand, wishing to equalize more nearly the supply and demand, ask a reduction of hours of working. These were fixed in 1874 by an act of Parliament at 56½ per week. Since that time, however, great progress has been made, and it is asserted that a forty-eight hours' week would suffice to produce all the yarn necessary to supply the weavers' demands. The cotton trade is one in which improvements are constantly being introduced to facilitate labor and to expedite production, and the United Kingdom has made greater progress in this respect than any other country, which, in other words, means that the importation of raw material and the consumption of products therefrom have largely increased.

In the following table the average importations for quinquennial periods are given:

	Pounds.
1860-64	940 800,000
1865-69	1,232,000,000
1870-74	1,523,200,000
1875-79	1,422,400,000
1880-84	1,713,600,000
1885-89	1,724,800,000
1890	1,792,000,000

As regards the home consumption of these quantities, both in our own country and in the United Kingdom, great advances have been made. These probably are, however, no more than the usual increase in population would account for, as a great deal of this cotton produced is interwoven with other textiles to produce a diversity of materials. Placing Great Britain and the United States in contrast, the following is the result (in million pounds):

	Great Britain.	United States.
1861-65	628.6	181.2
1866-70	973.8	381.9
1871-75	1,228.6	524.7
1876-80	1,254.7	685.8
1881-85	1,444.1	856.7
1886-90	1,540.8	1,073.8

From this it appears that the average quantity consumed in the United States has expanded at a greater rate than in the United Kingdom.

The largest supply of cotton for use in the latter country is obtained from the plantations of our Southern States, from which the moderately coarse yarns are produced, whilst the finest yarns are made from Egyptian cotton, the importation of which in Great Britain has considerably increased of late years, although the American demand has not been affected thereby. East India cotton is also being more extensively employed, which is of a coarser type than either American or Egyptian.

	British Imports (million lbs.) from		
	America.	East India.	Egypt.
1861-65	531.7	491	191
1866-70	1,168.6	576	191
1871-75	1,682.3	538	238
1876-80	2,231.5	407	268.7
1881-85	2,717	540	292.8
1886-90	3,170	583	301.7
For 1890	1,316	228.7	181
For 1891	1,617	100.8	225

The hours of labor, as before stated, have been periodically reduced by statute, and is now fixed, since 1876 to 56½ hours per week. In some parts of the district fifty-six hours obtains. In 1850 the average weekly working was sixty-five hours, in some places sixty-eight and in others seventy-two, which continued in vogue until the adoption of the act in 1876. These longer hours were, of course, at that time more necessary in consequence of less facilities in the way of machinery, etc.

Similarly the wages paid have moved in the lines of improvement, as may be gathered from the following table:

Employe.	Average Weekly Earnings.			
	1850.	1870.	1891.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Minders	0 18 0	1 2 0	1 15 0 to	2
Winders	0 8 6	0 11 6	0 18 0	
Overlookers	1 1 0	1 10 0	2 15 0 to	2 5 0

There can be little doubt from these figures, taken in conjunction with other facts as regards living and the means at the disposal of the cotton laborers for recreation and relaxation, that his position has very greatly appreciated during the last ten or twenty years. Questions of wages and hours of labor must of necessity arise for settlement; it is a condition of progress in every industry; but the method to arrive at an amicable arrangement in every phase of the subject has not yet been revealed.

Probably the most remarkable department of the cotton industry of the United Kingdom is that of the exportation of manufactured articles. Great Britain is the material purveyor of nearly every country in the two hemispheres to a more or less extent. Her manufactures of cotton, or of cotton combined with other textiles, are of enormous proportions. In 1891 her shipments of the various descriptions were as follows:

	Million yards.
Unbleached	2,176.6
Bleached	1,256.7
Printed	904
Dyed or manufactures of dyed yarn	574.8

In addition to these varieties there also are included in cotton-made articles hose, hosiery and thread, which, together with the above, equalled in value £52,000,000 sterling.

The growth of the industry is reflected also in the increases in the populations of the towns employed in this manufacture, which show more marked advances in this respect than any other places in the country not so engaged. This is much more evident, as in some instances the preponderance of the residents is composed of operatives at the mills.

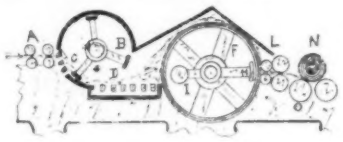
The following are the principal towns in which the cotton industry or collateral industries are fostered:

	Population.	
	1881.	1891.
Oldham	168,461	201,153
Bolton	192,405	226,803
Burnley	118,334	165,289
Blackburn	175,954	204,903
Bradford	311,582	341,881

The present strike amongst the cotton operatives is affecting about 50,000 hands, but the friends of the union appear to be in so prosperous a condition that no great discomfort or suffering is likely to occur, at any rate for the present. No doubt before long the fairness of the men's request will be recognized and the masters recompensed in a way satisfactory to all.

Steaming Cotton in Carding.

Ever since the steam-finishing process has been introduced into the art of finishing textile goods men have endeavored to apply the same priciple to the raw material. There has recently come to our notice a device which has been constructed with the view of communicating steam to cotton fibres. It is the invention of a cotton-mill superintendent, who has worked out the method during the past two years. No patents have been granted for the combination as yet, but as application has been made, the inventor has granted permission for the publication of the following description of the device. Before dealing with the new attachment it is necessary to be conversant with the principle of the cotton-picker. This will be understood by referring to the accompanying drawing.



COTTON-PICKER WITH STEAMING ATTACHMENT.

In this sketch A represents the feed rolls through which the cotton enters the machine. B is the beater which revolves about 1,000 times per minute. C is the cotton entering the picker. D are the grids. F is the dust cage. To permit the lap to leave the dust cage readily, a shield H is placed inside the cage and opposite the two drawing rollers L. This shield is balanced by means of the weight I. N is the lap of picked cotton all rolled up ready for delivery. The beating of the fans of the beater against the cotton as the latter passes over the grids is what effects the cleaning.

The steam is introduced into the picker through the grids. Each grid is hollow, and the top surface is perforated with small holes. A steam pipe supplies steam into these grids, and the steam thus passes upward into the fibre of the cotton. It is at this juncture that the cotton is in readiness for the application of an agency of this kind. The dust and dirt and all foreign matter will have been removed and the fibre is full open.

The superintendent who has devised this arrangement has worked at the business of carding for many years. He has found that the dry, cold climate of America infuses considerable electricity into the atmosphere and interferes with the good working of the cotton. Go into a cotton carding-room any time on a clear frosty morning, and it will be noticed that the fibres stand out in all directions on the cards. This is on account of the presence of electricity in the atmosphere. No such manifestations are present in England, because the air is much more moist there. The presence of moisture overcomes the effects of electricity. A number of devices have been invented for doing away with this electrical phenomenon in the carding and spinning rooms. We have the aerephor and other apparatus. All these are very good, but this cotton superintendent who has devised this latest appliance seems to have gained a point ahead of any of these from the fact that the steam is applied during the first stages of the cotton manufacturing, and from the fact that this application imparts a gloss to the fibre of the cotton, and consequently to the finished fabric. It has proven that steam introduced in this way will give a fine, delicate shine to the goods which cannot be attained in any other way.

Southern Textile Notes.

WELDON (N. C.) is to have the largest cotton factory in the State. Workmen are now engaged in clearing the site for a mammoth structure, and it is stated that the order has been given for the brick. General Mahone is largely interested in the enterprise.

MESSRS. BONSACKS BROS., of Bonsacks, Va., contemplate adding new woolen machinery; also machinery for manufacturing goods into clothing.

THE Liberty Woolen Manufacturing Co., of Bedford City, Va., intends to put in a burr-picker soon.

MR. N. W. STEELE will rebuild at once his woolen mill which was recently burned at Haight, Md.

THE Waco (Texas) Cotton Factory will be sold at public sale on January 3 under the trust deed given to the Corbin Banking Co. of New York to secure bonds for $100,000.

MR. GEORGE TAYLOR, of Fort Worth, Texas, intends to erect at Laredo a cotton and woolen mill of 7,000 spindles. A building has been secured, and work on the plant is to begin withir ninety days.

THE Old Dominion Cotton Mills has recently replaced its old machinery with twenty Platt revolving top-flat cards, 4,000 49D Rabbeth spindles, three Pettee drawing-heads, Potter & Atherton openers and lappers, etc. This plant produces brown sheetings and shirtings of good quality. John W. Arrington is treasurer and agent of the company.

THE Riverside Knitting Mill, of Tarboro, N. C., manufacturing hosiery and underwear, has lately been considerably improved by the proprietor, Mr. John F. Shackelford. A large addition to the plant has been built and considerable new machinery will be added. This plant produces a fine line of silk goods well known in the market.

THE erection of the Alpha Cotton Mill at Athens, Ga., is now assured, the full amount of the capital stock, $35,000, having been subscribed. W. D. Griffeth and Henry Lovern are the prime movers in the project, and, together with Thomas Bailey, J. A. Hunnicutt, R. K. Reaves and others, form the company. Two thousand spindles will be put in, and both yarns and cotton rope manufactured. Operations will start about March next.

PHOSPHATES.

Experiments with Soft Phosphate as a Fertilizer.

ALEXANDRIA, VA., December 17.

Editor Manufacturers' Record:

In response to your request to write an article giving the result of my experiments with Florida soft phosphate, I shall endeavor to demonstrate that practical experiments, which, after all, are the only satisfactory evidences of the value of any fertilizer, prove that for such crops as those upon which we experimented there is no fertilizer which gives prompter results or which will so surely restore worn-out lands.

My experiments were carried on at Mount Zephyr farm, a few miles below this city (Alexandria, Va.), in Fairfax county, the farm being a 500-acre tract of the original Mount Vernon estate. The first experiments were made three years ago on the least fertile of all the fields, which contained about twenty-five acres. Half of this field was planted in oats, the soft phosphate being used as a fertilizer, with no further manipulation than grinding it as finely as possible; the balance of the field was planted with the same crop, upon which high-grade commercial fertilizer was used, and when the crop was harvested we found the yield upon the two halves of the field practically the same, but the half upon which soft phosphate was used cost only half as much for its fertilizer.

That same season we planted a field in Irish potatoes in the same manner, and when that crop was gathered the portion upon which the soft phosphate was used gave a much larger yield of potatoes than the other portion; the potatoes were larger and more mealy and kept in better condition during the winter than those upon the portion planted with the high-grade commercial fertilizer, and we were not troubled with the potato bug during that season.

The fall following we planted a 50-acre field in wheat in the foregoing manner, wheat being substituted for oats, and when the crop was harvested we obtained a much larger yield of grain from that portion planted with the soft phosphate, demonstrating that the phosphate, being a longer time in the ground, gave the plant a much larger percentage of phosphoric acid.

These experiments were so encouraging that the following spring and fall we used no other fertilizer than soft phosphate upon the farm for any of the crops—corn, wheat or potatoes—and the result proved most satisfactory, and at this present time we have the pleasure of not only obtaining good crops at a reduced cost, but we observe a very decided improvement of the soil.

In November of this present year we planted 100 acres in wheat, using the soft phosphate exclusively as a fertilizer, and we feel confident that we shall harvest a fine crop.

Our experiments demonstrate that by using the soft phosphate we obtain a more valuable fertilizer at a much lower cost, the price being $15.00 per ton here. We notice a decided and permanent improvement of the soil; the crops withstand a drouth better; the large percentage of the carbonate of lime which this phosphate contains sweetens the soil, and the year's crops are larger, grass being sown with the wheat, thus deriving the full benefit of the fertilizer.

We would wish to still further carry on these experiments under the direction of the United States Agricultural Department, and as our farm is so near Washington, this might be accomplished with very little trouble or expense to the department, while their report, if satisfactory, would be of great benefit to the agriculturists of the country by causing them to use a valuable fertilizer at a low cost.

The phosphate used in making these experiments was purchased from the mines of the Standard Phosphate Mining & Chemical Co. at Kendrick, Fla.

A. H. AGNEW.

Report of South Carolina's Phosphate Inspector.

Mr. A. W. Jones, phosphate inspector for South Carolina, in his report of the operations for the year 1892 to August 31, says: The total number of tons of phosphate rock mined during the year ending August 31 were 192,461 tons, as against 182,156 tons last year, showing an increase of 10,305 tons. The total shipments of rock during the year were 156,095.61 tons, as against last year 169,292.68 tons, a decrease of shipments of 13,197.07 tons. Total number of tons of rock on hand August 31, 1892, were 63,365 tons, as against last year 27,000 tons, showing an increase on hand of 36,365 tons. Of the rock sent to market there have been shipped to foreign ports 113,225 tons, coastwise 23,838 tons, taken at Charleston 10,398 tons and at Beaufort 8,634 tons. The operations for the fiscal year commencing November 1, 1891, and ending October 31, 1892, are as follows: Shipments for the year, 168,270.25 tons; rock on hand October 31, 1892, 78,190.10 tons, and the royalty for the year, $168,270.25. The estimated production for the next year, based upon the operations of the past four months, is placed at 260,000 tons.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, December 22.

The local phosphate market has ruled fairly active during the week, and prices are generally firm and a shade higher, in sympathy with the advance at points of production. The volume of transactions in Florida and South Carolina phosphate rock has been larger and considerable business has been done for future delivery. The only arrival noted is the Alice from Tampa, Fla., with 715 tons of phosphate rock. In charters for the week we have to report the schooner Ida Lewis to load at Ashley river, S. C., and the Jennie Butler at Ashepoo, S. C., both for Baltimore. In the list of values there is a firmer tone throughout. We quote as follows: Ashley river $4.75 and Charleston, S. C., $5.00. River rock is firm at $4.75 f. o. b. for 58 to 60 per cent. product. Florida rock is also firmer at $4.00 to $4.75 for Charlotte Harbor and Tampa 60 to 70 per cent. product, and $3.50 to $3.75 for 50 to 55 per cent. product. Florida boulder 75 to 80 per cent. is steady at $8.50 to $8.75 f. o. b. Fernandina. We quote:

Phosphate rock f. o. b.	Charleston	$4 75@5 00
" "	Peace river	4 25@4 75
" "	Baltimore	6 25@7 25
" (ground)		8 75@9 25

The fertilizer market is active and firmer in sympathy with the sharp advance in the West Values throughout the list are all higher and stocks continue very light. We quote dried blood 2.50 to 2.60 f. o. b. at Chicago; tankage 9½ to 10 per cent., $22.00 to $22.50 per ton, and 7 to 8 per cent. at $18.50 to $20.00 per ton; concentrated $2.10 to $2.15, and hoof-meal $2.10 to $2.15 Chicago. Fish is scarce, with none offering except ground, which is held at $32.50 to $35.00 per ton. In manufactured goods dissolved South Carolina or acid phosphate 12 to 15 per cent. is quoted at $9.00 to $9.50, as to quality. Concentrated superphosphate 18 to 20 per cent. is firm at 75 cents a unit; 30 to 35 per cent. at 85 cents, and 40 to 45 per cent. at 90 cents.

CHARLESTON, S. C., December 20.

The phosphate market continues steady but quiet, with the outlook fair for slightly better prices in the near future. The volume of business is regular, but not of great proportions under the present demand. Considerable sales have been made during the week for future delivery at a better range of values. The shipments reported during the week are 200 tons ground rock per steamer to New York, and for Baltimore the schooner Lida J. Lewis took 800 tons crude rock, and the schooner Katie J. Irelan 1,000 tons. In the list of values there is no material change, and the market closes steady at $3.75 to $4.00 for crude rock f. o. b., $4.75 to $5.00 for hot air dried and $7.00 to $7.50 for ground rock. Phosphate freights are unchanged, with a moderate demand for handy-sized vessels. The current rates are $2.25 Ashley river to New York, $1.90 to Richmond, Va., and $1.80 for Baltimore.

The following table, prepared by Mr. Paul C. Trenholm, represents the shipments of phosphate rock from Charleston for the month of November of the years 1891 and 1892:

Domestic.	1891.		1892.	
	Crude.	Ground	Crude.	Ground
Baltimore	6,112	.....	2,805	.....
Philadelphia	725	.....	500	.....
New York	700	.....	740	.....
Weymouth	835	.....	900	.....
Barren Isl., N. Y.	575	.....	.....	.....
Richmond, Va.	455	.....	730	.....
Wilmingt'n, N.C	.....	.....	755	.....
Alexandria, Va.	600	.....	.....	.....
Cartaret, N. J.	.....	.....	1,110	.....
Savannah, Ga.	160	.....	.....	.....
Seaford, Del.	600	.....	.....	.....
Wilmingt'n, Del.	.....	.....	520	.....
Mantua creek	.....	.....	718	.....
Newark, N. J.	.....	.....	.....	529½
S. C. R. R.	.....	.....	2,886	.....
C. & S. R. R.	1,671	.....	.....	.....
N. E. R. R.	1,050	.....	477	.....
Total	13,483	.....	12,141	529½
Foreign	189	.....	.....	.....
Grand total	13,672	.....	12,141	529½

The shipments of phosphate rock by the South Carolina Railroad for the months of September and October, 1891, were 8,450 tons, and by the C. & S. R. R. for October, 1892, shipments were 2,908 tons. The comparative exports of crude phosphate rock and ground from the port of Charleston from September 1, 1892, to December 16, 1892, and for the same time in 1891, are as follows:

Destination.	1892-93.		1891-92.	
	Crude.	Ground	Crude.	Ground
Baltimore	13,800	.....	16,911	.....
Philadelphia	6,546	.....	4,725	.....
Boston	.....	.....	.....	.....
Elizabethport	.....	.....	.....	.....
Wilmingt'n, Del.	1,578	.....	.....	741
Barren Is., N. Y.	.....	.....	1,085	.....
New York	2,682	1,076	2,300	688
Mantua creek	1,319	.....	.....	.....
Weymouth	4,380	.....	4,810	.....
Richmond	3,897	.....	3,151	.....
Seaford, Del.	600	.....	600	.....
Newton ck., N. J.	.....	.....	1,078	.....
Wilmingt'n, N.C	665	.....	450	.....
Welsh Point	.....	.....	300	.....
Orient, L. I.	.....	.....	.....	.....
Other ports	2,790	.....	2,490	300
Total exports.	38,257	1,076	37,810	1,729
Foreign ports	175	.....	392	.....
Grand totals	38,432	1,076	38,292	1,729

FERTILIZERS.

The fertilizer market is steady, with a fair demand. Acid phosphate in bulk is quoted at $9.50 to $9.75, and inspected, in bags, at $11.25. Ammoniated inspected is held at $18.00 to $18.50 for 2½ per cent., $17.00 to $17.50 for 2 per cent. and $16.00 to $16.50 for 1 per cent. for future delivery.

FERNANDINA, FLA., December 19.

There is considerable activity in phosphate matters at this port, and business generally is looking much brighter than for some time past. We have now a real estate exchange talked of, and definite arrangements have been made to start one immediately, the office quarters procured and other details arranged. There is considerable phosphate rock ready for shipment, and arrivals during the past week have been numerous. The steamship Ortyga will load 18,000 tons, and the Storra Lee 1,000 tons. The steamship Haygreen sailed from Genoa on November 25, and is expected in a few days. N. B. Borden & Co. will furnish her with 15,000 tons of phosphate, and she will complete her cargo with cotton at Brunswick, Ga. The Lannington is due this week to take on a cargo from the French Company. The brig Lloyd with 400 tons phosphate from the French Company has just sailed for England.

PORT TAMPA, FLA., December 19.

A fairly active market in nearly every industry is the rule at the port, and there is a decidedly better business in progress than for some time past. The extensive phosphate interests which find an outlet here is the principal factor in support of trade, and at present the outlook for this industry seems better. Among the changes here may be mentioned the Gulf National Bank, which with its capital and business has quietly changed hands. Mr. C. B. Lloyd, of Brunswick, Ga., becomes president, and Mr. A. J. Knight, of Tampa, vice-president. The board of directors is composed of C. B. Lloyd, A. J. Knight, A. C. Clewis, A. Fuller and F. B. Squires, secretary of the Standard Oil Co., of Cleveland, Ohio. Among the shipping in port may be mentioned the schooner Charles S. Schall, loading pebble for Philadelphia. The Wallace K. Boyd will load with pebble for Baltimore. The British steamship Neto, of Liverpool, Eng., and the Annandale are also loading for United Kingdom and Continent. The schooner Edith Berwind is loading pebble at the inner slip.

Phosphate and Fertilizer Notes.

THE shipments of phosphate rock from Punta Gorda on the 7th inst. were 1,085 tons for Baltimore by the schooner William E. Downs by the Peace River Phosphate Co.

THE annual meeting of the stockholders of the Lake Hancock Pebble Phosphate Co. will be held at Bartow, Fla., on the 10th of January, 1893, for the purpose of electing a board of directors and to transact such other business as may come before the meeting.

TWO phosphate ships arrived at Fernandina on the 15th, the Storra Lee, of the Murrell Line, and the Ortyga, which will take a cargo of phosphate for the Dunnellon Company.

ADVICES from Raleigh, N. C., reported the discovery of extensive phosphate beds of rock in Pender county. While digging a ditch to drain some meadow lands near South Fork the bed was struck. The quality of the rock is said to be very fine, and the location is on the line of the Wilmington & Weldon Railroad.

THE phosphate mines near Fort White, Fla., are all doing well. The Perine Phosphate Co. and the T. W. Pitts Phosphate Co. are receiving large quantities of machinery and will soon be ready to operate.

THE Clay County Phosphate Co., near Green Cove Springs, Fla., whose phosphate beds are near the Southwestern Railroad, are getting ready to take out their pebble in large quantities. The company has a stratum three miles in length, which has been examined to the depth of seventeen feet, and rich throughout.

THE Dunnellon Phosphate Co. has suspended mining operations at Istachatta and has moved all tools and machinery back to Dunnellon, Fla.

MR. J. NORTHCOTT, manager of the Fort Meade Phosphate Works, visited Punta Gorda last week, and has loaded up the schooner Thomas N. Stone with 593 tons of phosphate, consigned to New Orleans.

THE British steamship Strathspey, for Bremen and Liverpool, cleared from Brunswick on the 18th, and had among her cargo 1,000 tons of phosphate rock.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 431.]

The News of Wall Street.

[From our own Correspondent.]

NEW YORK, December 20.

We have just had something like a thunderstorm in the street. Surely nothing could more resemble the unnaturalness of the event than a December thunderstorm. A semi-panic over the export of gold at this season of the year; money running up to 30 and 45 per cent. on two or three days for call loans or stock collateral; bankers calling in their money on short notice and refusing to lend at any rate on securities a day or two before counted good enough at current rates; those same securities, gas and lead, falling, like the feather and plummet in vacuum, with equal speed, with the other industrials; "whiskey," causing depression instead of buoyancy, and $6,000,000 of gold gone abroad in less than a week, including $4,000,000 to-day—all these being the circumstances that have caused Wall street to be a very lively section of this not ordinarily quiet city.

With the clearing up of the weather to-day comes a substantial rally all along the line. Stocks up, money down, and we have found time to talk it over and find out what the trouble really was all about. I have interviewed no less than a dozen conservative and solid bankers, and have asked them what the real reasons for this flurry were, and the gist of their opinions was the same. In the first place the decline in shares was artificial, purely. That there was nothing in the export of even $6,000,000 gold to cause a panic among money lenders, they all agree. In fact, the money rate ran up on the first day, Friday, to 15 per cent. on a stock contract in the board on a block of stock that made a man in a hurry to raise $400,000 at any price. The banks have been "leery" (street parlance for suspicious) of industrial shares for some time, and when a decline in them, beginning with "whiskey," was manipulated by a pool, the banks began to charge fancy prices for carrying the shares. Then everybody began to raid all the industrials, which have been features of the speculation for some time. The pool in Distillers' had got a big profit out of its holdings, and is believed to have operated on the bear side. I think I told you in a recent letter that these stocks made very pretty tools for speculative operations. All sorts of bear "points" came out as these stocks declined. The Distillers' Trust, for instance, was not to benefit by its large amounts of whiskey in bond, for the higher tax on all spirits that is an inevitable measure of this Congress was to be applied to spirits in bond. A careful review of half a hundred of such rumors affecting nearly every class of these stocks shows that their intrinsic value has not been affected in any way.

A careful survey of the business situation in this country also shows that there is no cause for the uneasiness that manifested itself in the street. *Bradstreet's* gives every part of the country a healthy look, and that concern is no liar. Money is not "tight" outside the board-room of the Stock Exchange. Washington advices show that the Treasury is pledged not to permit gold to go to a premium. The very condition of the sterling exchange market shows that the exports of gold are in a measure abnormal. Exchange to-day is weaker. Europe is in need of gold. I have a little theory of my own which may be given for what it is worth. Since the Baring failure we have taken back from Europe 70,000,000 pounds sterling of our own railway and industrial securities, mostly from England. That has kept the balance of trade on edge ever since, but those have been paid for by the natural increase of our wealth. England, having got rid of "Americans," is bearish on them. So three English markets are interested in discrediting American credit, viz., the cotton, wheat and stock exchanges—cotton, because we are holding our product too high to suit the spinners, who must have it, but won't buy at this price; wheat for the same reason; stocks for the reason that when they have money to buy they want to get them cheap. Now, with trade on an even edge and Europe taking little of our cotton and cereals, it is natural that exchange should rise. If money were so dear as 40 per cent. in New York for any good and valid reason, there would be gold imports at this time, not exports. I won't bore you with any more of this subject in this letter, though it has been the one absorbing topic in all street circles this week. As I said, the sky cleared to-day.

* * *

We shall have a chance to see in a few days how the new Central Traffic Association's pooling arrangement under the other name of an apportionment of traffic is going to work. Weaker lines have begun to kick over the traces at once, and have overhauled their allowance of tonnage to the East. The adjustment of the next month's rates will be disciplinary. If they will stand this it looks like success for the pool. There is the usual hubbub among the granger legislators and their class in Congress already over the proposition to take from the interstate commerce commission the anti-pooling clause, "our only barrier against monopolistic extortion," and all that sort of thing. In point of fact, Mr. Depew pointed out that if the pooling clause is kept in the bill, the small towns along the trunk lines will be "only good for residences for wealthy United States senators," as this jocular observer put it. It is a safe rule to go by that railroad men keep constantly in mind that diversity of traffic and building up the territory through which they run are profitable to them. It is safer to let business conditions, not government interference, govern the railway interests of this country.

The anti-option bill goes over until after the holiday recess in the Senate. There are going to be cranks enough in the next Congress to make it highly possible that this measure will become a law. Yet if they would come here to Wall street one by one and see how "options" work and talk the question of buying and selling as they are managed by the whole civilized world, I think these gentlemen would go back to their constituencies with a feeling akin to shame at their ignorance and prejudices. And, apropos of that, I have heard at this end of the wire of no mass-meetings to denounce the wicked exchanges as the authors of the iniquitous rise in cotton, which has added—how many millions?—to the visible and tangible wealth of the South. Even Jerry, of Medicine Lodge, learned a good many new things about civilization when he paid a brief visit to the bulls and bears and bankers and "gold bugs."

That Georgia Central Suit.

[From our own Correspondent.]

NEW YORK, December 20.

The long-promised suit of Receiver Oakman, of the Richmond & West Point Terminal Railway & Warehouse Co., in the matter of the leasing of the Georgia Central system, filed on Saturday in the courts of this State, tells a very interesting story of one of the circumstances leading to the undermining and discrediting of the company and its allied interests. The suit is brought against the syndicate whose little operation in Georgia Central has cost the Terminal $700,000 in interest alone in three or four years. The company must also restore to the Georgia Central seven and a-half millions. The Terminal has not got a cent out of it. Both cows seem to have been milked pretty dry in the process. The parties who engineered this Georgia Central transaction are Juneau, Swann & Co., H. B. Hollins & Co., August Belmont & Co., Lehman Bros., Kessler & Co., I. & S. Wormser, Scholle Bros., J. & W. Seligman, Blum, St. Goar & Co., Heidelbach, Ickelheimer & Co., E. W. Clark & Co., Isaac L. Rice, John C. Calhoun and Patrick Calhoun.

The history of the deal as set forth in the complaint is as follows: The defendant syndicate paid about $4,000,000 for 40,000 shares of Georgia Central. Then they organized the Georgia Company, capital $16,000,000 nominally; incorporators, syndicate employes. Then through employes they "sold" the Georgia Company the Georgia Central shares for $20,000,000 in paper—$16,000,000 stock and $4,000,000 in collateral trust bonds secured by the 40,000 shares. Then they owned through the Georgia Company $4,000,000 collateral trust bonds in this stock. Little was sold.

Inman became president of the Richmond Terminal in 1888. Later the Calhouns entered the Terminal board, which already contained Simon Wormser and James Swann. Then the syndicate, through Emanuel Lehman, offered the Richmond Terminal the Georgia Company stock (entire issue), which they could not sell in the market, for $4,200,000. The syndicate directors of Richmond Terminal voted approval, that is, agreed to buy with the Richmond Terminal's funds from themselves, not all the Georgia Central stock, but a part of their recapitalization of it, for those 40,000 shares of Georgia Central were now represented by $16,000,000 Georgia Company stock and $4,000,000 collateral trust bonds. Moreover, the syndicate sold the Terminal, through its own votes in the board, $1,000,000 of the collateral trust bonds (the pawn tickets of one-fourth of the Georgia Central stock) at 95, and arranged for the Terminal to guarantee the rest of the pawn tickets through its controlled company, the Richmond & Danville.

Here then are $4,000,000 worth of stock, at market rates, transformed by magic jugglery into—

$16,000,000 Georgia Company stock sold for	$4,200,000
$4,000,000 Georgia Company bonds, worth at 95	3,800,000
	$8,000,000

That beats making two blades of grass grow where one did before.

President Inman borrows $250,000 on the credit of the Terminal. This goes directly to himself and the rest of the syndicate as an instalment on the purchase money. Then to pay the rest, this is what was done by Inman and Calhoun for the Terminal Company with the Georgia Central. Watch the prestidigitator closely now.

The Terminal Company, H. B. Hollins & Co. and the Georgia Central covenanted as follows:

Hollins & Co. to buy $5,000,000 of Savannah & Western Railroad first mortgage 5 per cent. bonds guaranteed by the Georgia Central from the Georgia Central at 95, or for $4,750,000.

The Georgia Central to buy of the syndicate $3,500,000 Georgia Company's pawn tickets on Georgia Central stock at 95, or for $2,325,000.

The Georgia Central to lend $3,500,000 to the Richmond Terminal, to be used by it in buying all the collateral trust bonds a month thereafter.

The Georgia Central to pay the Richmond Terminal and H. B. Hollins & Co. $25,000 each gratuity.

Now, of the $1,000,000 collateral trust bonds bought of the Georgia Company, the Richmond Terminal had sold to Mr. Inman $500,000. This it had to buy back again with the money borrowed of the Georgia Central. To meet its payments the Terminal had to issue the collateral trust 5s, which sold at 80, thus still further increasing the face value of securities representing the Georgia Central pawn tickets.

Now it appears that the Georgia Central's dividend of 8 per cent. paid right along had been paid out of borrowed money, and that it joined in this scheme of financiering to raise money to pay floating debt. So the syndicate unloaded at a fancy price on the Terminal stock not worth its market value at the time of its original purchase.

The complaint contains these two paragraphs, which show the net result, so far as it affected the Terminal shareholders:

All the acts done in pretended purchase of the stocks and bonds of said Georgia Company from the syndicate defendants, and the taking from the assets and money of plaintiff of over $7,000,000 cash to put into the pockets of the said faithless directors, the syndicate defendants and their confederates, were all acts planned, done and performed by said Inman, or under his direction, in the execution of such original fraudulent syndicate scheme, and the pretended contracts thereunder were fraudulent, and that the receipt and appropriation of over $7,000,000 of the money and assets of the plaintiff by the defendant directors and their associates was a wrongful diversion of trust funds.

The said syndicate directors and their associates not only advantageously sold their discredited and unavailable securities, but escaped from a perilous speculation to which they were committed and realized on the transaction out of a trust estate an unfair, unconscionable and fraudulent profit, amounting to over $3,500,000.

Not bad juggling, eh?

San Antonio & Aransas Pass Reorganization.

The plan of reorganization for the San Antonio & Aransas Pass as modified at the recent meeting in New York of the reorganization committee may be carried out without foreclosure, but this is left to the judgment of the committee. They now recommend that authority be given for the issue of $21,600,000 first mortgage 4 per cent. 50-year gold bonds, principal and interest guaranteed by the Southern Pacific Co., of which $2,700,000 will be reserved for future extensions (limited to 100 miles) and $1,800,000 for improvements and equipment, leaving $17,100,000 for purposes of reorganization. The committee will use their judgment in determining whether there shall be a foreclosure sale. Securities must be deposited on or before January 19, 1893. At the stockholders' meeting held in San Antonio on December 15 the proposition to make a mortgage securing an issue of $21,600,000 of 4 per cent. bonds was adopted. The proposition to increase the capital stock from $5,000,000 to an amount not exceeding $12,500,000, as contemplated under the old plan, was rejected.

Reorganization of the Three Cs.

According to the plan of reorganization for the Charleston, Cincinnati & Chicago Railroad, dated August 2, 1892, and which amends and supplements the first plan advised in 1891, cash expenditures aggregating $8,032,500 are required. This is apportioned as follows: To complete road as per engineer's estimates, $5,800,000; new equipment, $500,000; indebtedness of railroad, receiver's certificates, etc., $1,000,000; expenses of reorganization, etc., $132,500; interest during construction, $600,000. To provide for this amount and for any contingent expenses the company is to issue new first mortgage 6 per cent. 40-year gold bonds, redeemable after ten years, at the option of the company, at 103 per cent., at the rate of $17,500 per mile of road completed and to be completed, being a total issue on 510 miles of $8,925,000. A syndicate is to be formed to take these bonds. The terms are each subscriber for a new $1,000 first mortgage bond will also receive four shares of the par value of $100 each of the new capital stock of the company. This is to be issued at the rate of $25,000 per mile. The present first mortgage bonds and

coupons for unpaid accrued interest are to be retired and cancelled by an issue of new second mortgage 50-year gold bonds at the rate of $8,750 per mile of railroad, being a total of $4,462,500 for 510 miles. These bonds are to be designated as series A. The company is to issue additional second mortgage 50-year gold bonds at the rate of $8,750 per mile, a total for 510 miles of $4,462,500. These are to be known as series B. No interest is to be paid on the bonds of series A for the first two years; after that the rate will be 1 per cent. for the third year, increasing 1 per cent. each year until 5 per cent. is reached. On series B no interest is to be paid for the first ten years, unless earned in excess of operating expenses and prior fixed charges. If paid it is not to exceed 5 per cent., and after ten years 5 per cent. is to be paid in any event. The holders of the present first mortgage bonds are to receive in exchange for each $1,000 bond held $500 of series A and $500 of series B bonds and seven shares of the new capital stock of the par value of $100 each. The total issue of new bonds would be $17,850,000, and of capital stock $12,750,000.

A Baltimore & Ohio Improvement.

The Baltimore & Ohio Railroad Co. has decided upon an important improvement on its Hempfield division. Between Whitehall and Miller's Grove, five miles, is a hill which, it is said, has given the engineering and mechanical departments more trouble than any point on the line. It has a very heavy grade on each side, and helpers have to be kept to assist passenger and freight both ways. This is hard on machinery and rather dangerous. It has been decided to cut a 1,700-foot tunnel through the hill, and, by taking a new route, to shorten the distance from five miles to two. It is estimated that the improvement will cost about $300,000, and work is to be commenced as soon as the weather will permit.

Chicago, Harriman & South Atlantic.

The preliminary survey was lately completed for a railroad having for its ultimate object the connecting of the grain fields and cattle ranges of the Northwest with the nearest Atlantic seaport towns, Charleston, Port Royal and Savannah. For its proximate object it has the development of the coal fields of the Cumberland plateau of Tennessee by giving them a new outlet at the seaports mentioned, in the construction of a line from Harriman and Knoxville, Tenn., to Walhalla and Anderson, distributing points in South Carolina. The project is known as the Chicago, Harriman & South Atlantic Railroad. R. H. Fitzhugh, the chief engineer, has made an exhaustive examination of the route, and his conclusions are fortified by a convincing array of figures and authorities. The main line will be from Harriman to Loudon along the Little Tennessee river, through the gap where the river cuts through Chilhowie mountains.

A New Alabama Coal Road.

Steps have been taken which afford a promising prospect for the completion of an important coal road tapping the celebrated Warrior fields in Alabama. A conditional option has been given J. W. Woolfolk, president of the Montgomery, Tuskaloosa & Memphis Railway, on the right of way and franchises of the partially-built Tuskaloosa Northern Railway. This line is graded for seven miles, and its route penetrates some of the richest coal lands in the Warrior basin. It is the purpose of Mr. Woolfolk to embrace this new road in the Montgomery, Tuskaloosa & Memphis system. An arrangement has been under consideration by which funds could be readily obtained for carrying out the project of the Montgomery, Tuskaloosa & Memphis Company, but no official announcement of what conclusion was reached has as yet been made. This company was formed to build a railroad from Montgomery to Tuskaloosa, Ala., a distance of 107 miles, and considerable work has been done.

Kentucky's Railroads.

The work of the Kentucky railroad commissioners for the past year is finished and the results are announced. The total valuation of railroad property in the State by the commission is $52,316,038. The total valuation as made to the commission by the railroads was $31,814,855. The average valuation per mile of all roads is $17,316. The assessment for 1891 was $50,048,741, and the figures for 1892 show an increase of $2,267,297. The mileage reported by the commission in 1891 was 3,020 and in 1890 3,000 miles. The 1891 figures include 15.7 miles then under construction, but only completed in May, 1892, by the Ohio & Big Sandy Railroad. This new track was built to change the route of the Ohio & Big Sandy, and a mileage of about the same length has been abandoned.

The report of the commission is for the year ended June 30, so practically there has been no railroads built in the State for the two years past. Since July 1 the Ohio Valley Railway Co. has completed a 10-mile extension from Gracey to Hopkinsville; the Kinniconick & Fesentone Railroad Co. extended its line thirteen miles further into Carter county; the Bird-Eye Coal Co. has built seven miles of road from a point on the Knoxville branch of the Louisville & Nashville, near Jellico, and other short roads have been built. There are now under construction fifteen miles by the Owensboro, Falls of Rough & Green River Railroad to be completed by February; about fifteen miles by the Louisville, St. Louis & Texas from West Point to Strawberry, on the main stem of the Louisville & Nashville, and a 10-mile belt line at Louisville by the Louisville Terminal Co., three miles of which are completed, and all to be finished by spring.

The valuation of some leading roads in the State is as follows: Chesapeake, Ohio & Southwestern, main line, $16,000 per mile, Elizabethtown branch $6,000, total valuation $4,566,396; Cincinnati, New Orleans & Texas, per mile $25,500, total $5,646,393; Kentucky Midland $8,500, total $344,225; Kentucky Union $9,000, total $839,555; Louisville Southern, main line, $14,500, total $1,594,527; Louisville & Nashville, main stem, $35,000, total, including all branches and divisions, $20,496,001; Maysville & Big Sandy $21,000, total $3,454,280; Mobile & Ohio $15,000, total $646,209; Nashville, Chattanooga & St. Louis $16,000, total $113,282; Ohio Valley, main line, $9,000, total $1.035,461.

New West Virginia Railroads.

There were recently chartered in West Virginia two promising lines which there are good reasons for believing will be built without much delay.

The first of these, in matter of importance, is the Dry Fork Railroad Co., organized for the purpose of constructing a railroad to commence at or near Bretz, in Tucker county, W. Va., and run southwestward along Cheat river, through the valleys of either Glade fork or Dry fork to the headwaters of Greenbrier river, in Pocahontas county, and thence southerly through Pocahontas and Greenbrier counties to a point on the Chesapeake & Ohio Railroad at or near Caldwell, in Greenbrier county, with branches and lateral roads up Red creek and the tributaries of Cheat river. The principal office will be at Bretz, Tucker county. The capital is $100,000, divided into shares of $100 each. The incorporators are: Martin Kane, of Wilmington, Del.; Levi Z. Condon, Baltimore; John M. Hummell, Philadelphia; James B. Rees, Rees's Tannery, W. Va.; R. F. Whitmer, Philadelphia, Pa.

The route described in the charter passes through some of the finest timber on the American continent, the forests along the route including all the well-known hardwoods of Northern West Virginia and some excellent pine. It is understood to be the intention of the incorporators, all of whom are already connected with the development of West Virginia's resources along some line, to open up for the lumber mills along the West Virginia Central & Pittsburg road a large area that is now inaccessible, and which will keep the plants along that line supplied with logs for years to come. But little attention will be paid to passenger and other traffic than timber for a time at least. If extended beyond the Randolph county line, which is a possibility, it would enter Pocahontas county, which is one of the richest in both iron and coal in all West Virginia. A gentleman acquainted with the efforts of the West Virginia Central to continue its line from the headwaters of Tygart's Valley river over to Greenbrier river, in its desire to reach the Pocahontas iron beds, stated that the line erected by this company is much the easier of construction, and that there is a strong possibility of the new road furnishing a solution of the problem that has vexed the West Virginia Central people so long and so seriously.

The Potomac & Appalachian Railroad Co. is to build the other line. The route begins at or near the Mineral county, West Virginia, and Virginia State lines, at a point on the Molle branch of the Potomac River road, opposite the city of Cumberland, Md.; thence to the Patterson creek valley; then in the general direction of Patterson creek valley to the headwaters of Luney's creek; down the same to the town of Petersburg, in Grant county; thence crossing the south branch of the Potomac and up the valley of Mill creek to the south branch of the Potomac at Upper Tract; thence with the general direction of the Potomac valley to the town of Franklin, Pendleton county; thence to the State line between Virginia and West Virginia. A branch road from Petersburg to connect with the Baltimore & Ohio Railroad at Romney, Hamshire county, by the way of Moorefield, Hardy county, is also contemplated. The principal office will be at Franklin, Pendleton county. The incorporators are George Crisman and W. J. Cowger, of Rockingham county, Va.; H. W. Jones, of Highland county, Va.; Wm. C. Kiser, of Franklin, Pendleton county, W. Va., and J. T. Kile, of Upper Tract, Pendleton county, W. Va.

The road cuts through an undeveloped but extremely rich country both in timber and coal.

Railroad Notes.

A BILL has passed the house of representatives of the South Carolina legislature repealing the act prohibiting members of the general assembly to ride on free railroad passes.

THE annual meeting of stockholders of the Denison & Washita Valley Railway Co. will be held in Denison, Texas, on January 6, 1893.

AT the recent annual meeting of the Paducah, Tennessee & Alabama Railroad, held in Paducah, Ky., the proposed extension of its road from Lexington, Tenn., south to Birmingham, Ala., and the extension of its Tennessee Midland branch east from Perryville to Nashville was discussed and arrangements will, it is reported, be made to build same during 1893.

THE Atlantic Short Line is the name under which the Macon & Atlantic will be reorganized by the syndicate of bondholders, contractors and creditors which purchased the property for $410,000 on November 30. The completion of this road as projected from Macon, Ga., to Colleton, S. C., on Port Royal harbor, is an achievement looked forward to by the citizens of Macon with much solicitude. With the Macon & Birmingham this line would supply the link for an unbroken line from Kansas City to the Atlantic ocean.

THE London Stock Exchange has listed $3,000,000 of Norfolk & Western additional preferred stock.

FORT WORTH (Texas) is destined to number another big system among its railroads. This is the Chicago, Rock Island & Texas, which during the year has been built from Minco, in the Indian Territory, south to Bowie, Texas, and will no doubt be extended to Fort Worth in the near future, giving that city a new through line to Chicago. Its final terminus will possibly be some point on the Gulf of Mexico.

THE following board of directors was selected at the recent annual meeting of the Richmond & Danville stockholders: W. P. Clyde, George J. Gould, R. S. Hayes, J. C. Maben, John G. Moore, J. A. Rutherfurd, Thomas F. Ryan, G. F. Stone, William E. Strong and Samuel Thomas, of New York; J. B. Pace, Richmond, and E. P. Howell, Atlanta. Messrs. Hayes, Maben, Ryan, Stone, Strong and Howell are new members. Messrs. Brice, Fahnestock, Calhoun, McGhee, Barbour and Inman drop out. President Oakman was re-elected.

ON the 19th of last May the woodwork and timbers inside the great Coosa tunnel on the Columbus & Western took fire and burned for several weeks before the flames were entirely distinguished. This was only accomplished by sealing up the tunnel and thus smothering the fire. The tunnel has since been repaired at a heavy expenditure and the frame support replaced with masonry. It was lately used for the first time since the fire.

THE jaunt of the inspection party of the Missouri, Kansas & Texas over the lines in Texas has given rise to several reports as to new extensions to be made. It is said that on the return to New York of the party, which includes Henry C. Rouse, of New York, president; Thomas C. Purdy, of Parsons, Kan., second vice-president; J. W. Maxwell, of Denison, Texas, superintendent of Texas lines; J. Waldo, vice-president, and a number of New York directors of the company, some plans in that direction will be outlined.

THE receivership of the Savannah, Americus & Montgomery has been made permanent. S. H. Hawkins, the president of the road, and T. Edward Hambleton, of, the well-known Baltimore banking-house of that name, have been appointed receivers. The order of the court provides that after paying the current operating expenses of the road, the net earnings be applied first to payment of all past due pay-rolls and all bills for supplies furnished during the last six months. The receivership is generally thought a most desirable arrangement, and the impression is that the reorganization will be speedily effected.

A MOVEMENT which has been on foot for some time past to establish a new national bank at Pensacola, Fla., has taken decided form, and the incorporators are ready for business. The stockholders of the new enterprise held a meeting on Thursday last, and it was decided to do business under the name of the Citizens' National Bank. The following directors were elected: T. E. Welles, I. M. Pfeiffer, A. Greenhut, H. B. Hatton, Rix M. Robinson, C. J. Heinburg, L. Hilton Green and William Fisher. The amount of capital stock was fixed at $100,000, all of which has been subscribed. The following officers were elected by the directors: L. Hilton Green, president, and William Fisher, vice-president.

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BALTIMORE, DECEMBER 23, 1892.

Notice to Advertisers.

The last forms containing advertisements are closed on Tuesday afternoon. New advertisements or changes should be received not later than Tuesday noon to ensure attention in the issue bearing date of the following Friday. Reading matter should be in our office on Wednesday, although late news can be received early Thursday morning.

THE plan of irrigating orange groves is meeting with increasing favor in Florida. Quite a number of orchards are now equipped with pumping and distributing appliances, and from the interest shown in them it is probable that a number of others will receive a similar outfit.

SENATOR GIBSON'S bill to authorize the Southern Bridge & Railway Co. to construct and maintain a bridge over the Mississippi above New Orleans was unanimously passed by the Senate on the 8th instant. The location of the bridge is subject to the approval of the Secretary of War. The bill requires that the bridge shall be made with only three spans between the banks and two piers in the river. The main channel span must be not less than 1,000 feet wide, measured at the water surface at low water. The lowest points of the structure must not be less than 85 feet above extreme high water. The bridge must be commenced within two years, and completed in five years.

Bradstreet's, after receiving reports from 1,915 correspondents in 671 cotton-growing counties, gives an estimate of the coming commercial crop of 6,460,000 bales. The reasons assigned for this heavy decrease in production as compared with last year are the much smaller acreage planted, the lateness of the planting season, damage by worms in the lower Mississippi valley and bad picking weather in Arkansas and Tennessee. Through its many correspondents *Bradstreet's* has every oppportunity of making a close estimate, and generally does, though last year its figures were over 600,000 bales short of the actual crop grown. Neill's estimate, also recently published, is reduced to 6,200,000 bales, and other authorities vary from 6,000,000 upward to 7,000,000. In the face of these lower estimates Mr. Ellison, of Liverpool, is increasing his estimate of the probable consumption for the coming year. In view of these conditions it is highly probable that there will be a smart advance in prices about the first of the year unless very definite proof is shown that the crop will exceed the figures given.

THE proposed action of the World's Fair management in reference to closing the grounds at 7 P. M. during the exposition has raised such a storm of protests from every quarter that it is difficult to see how the exposition authorities can be willing to carry out thier plan. From electricians and electrical exhibitors in particular the protest has been both loud and strong, and with good reason. The greater part of the electrical exhibits, which will represent some millions of dollars in value, will be apparatus for light and power. The latter may be seen quite as well in the day as the nighttime, but the lights would be absurdly out of place unless exhibited during the hours of darkness, when their beauty and brilliancy could be appreciated. Many private exhibitors and some of the State buildings have made extensive arrangements for electrical illumination, and the fair management has, for its own use in lighting the grounds and buildings, awarded contracts amounting to over $500,000. If the grounds are closed at 7 o'clock each evening there will be little use for this or any other lighting contract, as from May to October there is an abundance of light out of doors at that hour. With the proposed plan of illuminating the buildings and grounds the scene would be one of wonderful beauty and brilliancy in the evening. The artistic and beautiful arrangement of lights on State and other buildings, the brightly lighted grounds, the lagoon covered with lights from the electric launches, and, above all, the magnificent and wonderful electric fountain, would make this a time which visitors could never forget. It seems hardly possible that the authorities could be so shortsighted as to fail to see the many reasons in favor of remaining open at night.

Agrarian Demagogues and Sensible Men.

Governor Tillman, of South Carolina, deserves a place in history as the exponent of the most pernicious public policy that has ever been applied in any State in this Union. His administration has been infamous to an extreme, and he is still doing his best to bring ruin upon the largest vested interests in his State. His latest official misdeed has been the signing of the new railroad commission bill, by which the railroads of the State are delivered absolutely into the hands of the commissioners, from whose decisions there is no appeal. To the injury which this pernicious law brings upon the railroads Governor Tillman has added personal insult by expressions which would be unseemly in a private citizen, but which amount to a public disgrace when uttered by the chief magistrate of a great State.

To the committee of railroad employes who called upon Governor Tillman and urged him to withhold his signature from the bill, he said:

> The bill has already been signed and is now a law. The opposition of 8,000 or 10,000 railroad employes does not amount to a d—n, compared to the 50,000 or 60,000 farmers demanding its passage.

These are sentiments which might well be expected from Governor Tillman, and they embody concisely and clearly the principles upon which he is running the affairs of South Carolina. In the hands of such men as Tillman, and by the application of such principles as he represents, the affairs of the most prosperous State in the Union would soon reach a condition worse than anarchy. Reason and common sense are factors that have no place in the present administration in South Carolina. Government rests in the hands of grangers intoxicated with the power which they momentarily possess, but which in their hands is as dangerous as the play of children with fire. The day when Governor Tillman shall vacate the executive chair, and when the sentiments he represents shall be forever banished from the State, will be a day of jubilee for South Carolina.

We turn with pleasure from this sad state of affairs in South Carolina to more encouraging symptoms of reason which have appeared in Georgia. We commented last week upon Major Bacon's railroad bills, which were then under consideration by the Georgia legislature. Upon the strength of the arguments of Receiver H. M. Comer, of the Central Railroad & Banking Co., Major Bacon consented to withdraw his support of the bills he had introduced and to permit them to fall. They have, therefore, been killed. The chief consideration in this action was the injurious effect of the passage of the Bacon bills upon the reorganization of the Georgia Central, and the removal of this menace is a distinct gain to the railroad interests of the State. The course of Major Bacon was sensible and honorable, and he showed himself to be mindful of the welfare of the interests of his State as involved in the railroads.

The contrast between the legislatures of South Carolina and Georgia at this time is painful.

The Policy of the Cleveland Administration.

In a recent editorial in which we commented upon the pessimistic views of the *Manufacturer*, of Philadelphia, regarding the effect of the election upon Southern interests, we expressed the belief that the industrial interests of the South would not suffer under the new administration. We expressed a confidence that there would be no legislation that would do violence to the manufacturing or commercial interests of our nation. One of our readers in Arkansas, whose communication we print upon another page, questions the views we expressed, and asks us to define our meaning and position more explicitly. In our former editorial we purposely avoided an endorsement of either the present or the incoming administration, inasmuch as ours is an industrial publication wholly dissociated from political matters of every party. The position which we then assumed, perhaps without sufficient distinctness to satisfy our questioning correspondent, was this—that the incoming Democratic administration does not contemplate any sweeping away of protective laws which were established for the benefit of American industries, and which undoubtedly have largely contributed to the growth and prosperity of the manufacturing interests in this country. Speaking wholly apart from political influences and solely from a business point of view, we do not believe that the Democratic party, whatever may have been its utterances and promises during the campaign, contemplates the establishment of free trade.

Our belief is based more upon the utterances of Mr. Cleveland than upon the campaign promises of his party. During his former administration, in one of his messages to Congress on the subject of the tariff, Mr. Cleveland wrote as follows:

> It is not proposed to entirely relieve the country of this taxation. It must be extensively continued as a source of the government's income, and in the readjustment of our tariff the interests of American labor engaged in manufacture should be carefully considered, as well as the preservation of our manufactures.
>
> The question of free trade is absolutely irrelevant, and the persistent claim made in certain quarters that all efforts to relieve the people from unjust and unnecessary taxation are schemes of so-called free-traders is mischievous and far removed from any consideration of the public good.

Again, in his acceptance of the nomination last September, Mr. Cleveland said:

> Tariff reform is still our purpose. Though we oppose the theory that tariff laws may be passed having for their object the granting of discriminating and unfair government aid to private ventures, we wage no exterminating war against any American interests. We believe that readjustment can be accomplished in accordance with the principles we profess without disaster or demolition. We believe that the advantages of freer raw material should be accorded to our manufacturers, and we contemplate a fair and careful distribution of necessary tariff burdens rather than the precipitation of free trade.

Now, we view these utterances of Mr. Cleveland as embodying the plan that is likely to be followed by the incoming administration. We anticipate the removal of duties upon some of our raw materials, probably upon coal and iron ore, possibly the duty on wool. The repeal of the sugar bounty appears to be almost an assured fact, inasmuch as the sugar people themselves are united in their requests for its repeal and the restoration of the former duty, or even a duty of smaller amount. But we have looked more at the general principle rather than the details of policy in considering the probable action of the new administration, and we repeat our former assertion that we believe the action of the Democratic party during the next administration will be shaped in accordance with the best interests of the nation at large.

It is impossible to enact any tariff laws that will bear evenly upon all our interests. No law can ever be enacted which will not work injury and injustice to some interests. The vast extent and diversity of our industries, as well as the varied resources of our country, render it impossible to establish any uniform basis upon which all interests can be treated with equal justice. It is the function of our national government to frame laws that shall benefit the largest interests and the greatest number of people. We believe this will be the policy of the next administration.

The Outlook in the Southern Coal Trade.

Owing to the low water on the Ohio and Mississippi rivers little or no coal has been shipped south from Pittsburg since last July. The recent rains have raised the rivers sufficiently to permit shipments to be made, and several heavy tows have been sent down. Coal merchants in Pittsburg, however, state that the condition of the Southern coal market is discouraging to an extreme, as, while Pennsylvania coal was shut out by low water, the Southern miners went into the Mississippi valley market and stocked it, and arrangements were made between them, the railroads and selling agents which will effectually prevent Pittsburg from again securing control of this Southern market.

While such a state of affairs must be far from gratifying to Pennsylvania operators, to the Southern miners it is quite the reverse. Throughout the past summer and fall there has been a great deal of quiet work going on toward securing this end, and it is a pleasure to find that it has been so successful. The Alabama Great Southern and Georgia Pacific Railroads have both co-operated heartily in this move, the former in delivering coal in New Orleans and to such Mississippi valley points as it could reach, and the latter in carrying to Greenville, Miss., and making preparations at that point for a barge line to deliver to all points along the river. During last year the shipments of Alabama coal to New Orleans amounted to about 50,000 tons, and this year it is estimated that they will be considerably over 150,000 tons. Besides this, a large amount will be sent to the many consuming points along the river, and still further, many thousand tons will be exported by the company recently organized to ship from New Orleans and Mobile.

Indeed, with all things considered, there is a particularly attractive outlook for the Southern coal trade just now. The iron market seems to have a firmer tone, and furnaces are taking their full complement of coke; manufacturers are doing a large volume of business and require plenty of fuel; new manufacturing enterprises are going up and others are being enlarged; the addition of the Mississippi valley to the consumers, the success and assured growth of direct trade between Southern and foreign ports, and the already organized companies for exporting to Mexican and other points, all tend toward the rapid grown and development of a coal trade in the South which will be of far-reaching benefit to miners, owners of coal lands, those who will receive employment, and merchants and others through whose hands the money thus received will be put into circulation.

The Policy of the Next Administration.

ROGERS, ARK., December 8.

Editor Manufacturers' Record:

I have just read with much interest your editorial headed "A Case of Distorted Vision," in your issue of November 25, in which you comment on extracts from the *Manufacturer*, of Philadelphia, on its article on the effects of the late election, headed "The Results for the South." You, I see, take issue with the *Manufacturer* when it states that the results of the late election will prove unfortunate to the South from an industrial and manufacturing standpoint. At the latter part of your comments you remark "that while we cannot claim to be in the confidence of the guiding powers of the coming administration, we feel safe in saying that there will be no legislation that will do violence to the manufacturing or commercial interests of the nation."

This being your view of the situation, and which we all should hope to be true, you do not think that the sweeping away of all protective duties by the coming administration and Congress will have any detrimental effect either on our manufacturing or sheep-raising industry. The question is, Do you mean to say that this country will still be just as prosperous, and that the masses of the people will be in as good a situation with a law or revenue tariff with no protective features as they have been under a high protective tariff? You must remember that the Democratic party has promised time and again that if given the power they would take away all protective duties whatever. They have also declared time and again that all protective tariff legislation was unconstitutional and should be done away with as quickly as possible. It is hardly complimentary to the Democratic party to say that now, after thirty years of denouncing the protective tariff as robbing the many for the benefit of the few, they will fail to repeal all of these unconstitutional laws from which the people have suffered so long. You certainly do not mean to say that the Democracy will fail to do what it has promised so many times, when you remark further on in your article that no party can do violence to the business of the country without suicidal results. History tells us that political parties have changed tariff laws in the past, and have caused financial panics by doing so.

Pardon me for writing so much, but after reading your article I was still in the dark, but hoping that your conclusions will turn out correct and that this country will prosper as never before. Still I can't tell whether you meant that the Democracy would simply leave well enough alone, or would it live up to its campaign pledges, but still the country would prosper, no matter what is done. Perhaps in some other editorial you will throw light on this dark subject. S.

The South as a Cotton Manufacturing Section.

MACON, GA., December 17.

Editor Manufacturers' Record:

I have just been looking over your issue of December 2, and find some very interesting articles on the manufacture of cotton goods by Messrs. D. A. Tompkins and Henry G. Kittredge. I endorse Mr. Tompkins's articles and views perfectly, and only beg leave to set him right in one small point, and that is in regard to the competition of Indian, Egyptian, African and South American cottons. The export of cotton from the Indies has been on the decrease for the past twenty years. Export of Egyptian cotton has been on the increase for the past ten years, but it does not come in direct competition with our cotton, as it is used for the manufacture of goods that cannot be made out of American cotton. African cotton, which has only been raised for the past five or six years, does not come in competition either, for it is all long-staple or Sea Island variety. South American cotton—that coming from Peru—is long-staple and does not compete with our cotton. Brazilian cotton is mostly long-staple. Exports from both of these countries in South America have decreased steadily for some time.

In regard to Mr. Kittredge I will say this, that I have been informed that the East was looking on the South's progress in the manufacture of cotton goods with eyes of envy, and I do not blame them, for it is only a question of time when they will be forced to come South or go out of business. In regard to power, I don't know of any country that has more cheap power (such as water-power) than the South—that is, that portion of the South east of the Mississippi river and north of Charleston, S. C. There is in the State of Georgia alone nearly one million of water-power along its streams that only needs development, and whose owners know nothing of its value, and I presume that there are Southern States that have much more power than this. In reference to cheap fuel, cheap iron and coal, I don't know of any country that has cheaper fuel than the South, save in those regions where they have natural gas. Iron has been sent from Birmingham, Ala., to portions of the iron district of Pennsylvania, and has sold here at Birmingham for $7.50 per ton, and I think, if my memory does not deceive me, was exported to England.

In regard to climatic influences, I don't think that would have any effect, even if you were to go to Florida, or still further south than that. It is not as cold on the western or Pacific coast of this country as it is in the East or on the Atlantic coast, on the same parallel at the same elevation. Across the Pacific, in Asia, there is a still more perceptible change, and Italy, Spain, Turkey in Asia and Greece are much warmer on the same parallel and elevation than in this country. England, Scotland, Iceland, Norway, Sweden and a portion of Russia are warmer than this country on the same parallel. This difference of temperature on the same parallel is due to the influence of such streams as the Gulf Stream. One of these streams passes near Japan, China, Alaska, and has its influence on the west coast of this country, and also, I believe, a current of the same kind makes itself felt on the west coast of Europe, which has an influence on the climate. Also, if you will refer to ancient history, archæology, etc., you will find that the greatest development the human race has ever reached was in a warm climate near the equator. Take the development of ancient Greece, Egypt, China, and in this country Mexico and Central America, and you will find that there was there at one time a people who were far more developed than any at the present day in all the mechanical arts and sciences.

You will find from the census of 1860 which portion of the country was seeming to have the most prosperity, energy, and gaining the most money, etc., and you will find that it was the South. Slavery ruined the South, in conjunction with the war, and made the North. This you will see very plainly when you examine the census of 1870. In 1860 South Carolina was worth as much as New York, New Jersey and Delaware combined. In 1870, just ten years later, New York alone was worth six times as much as South Carolina. For the first fifteen years after the war the South was under military, or as I should say, carpet-bag rule, and could not make any progress, and all of her people were in a bankrupt condition, and the majority of the flower of her population had been killed in the war, and in addition there were four millions of slaves set free, who had no money, no education, and who had no notion of doing any kind of work, and who were intoxicated by freedom and lawless to a considerable extent, and very inefficient labor at best. With all these drawbacks, look and see what the South and the people have done in the past ten years, since the removal of the carpet-bag government and officials.

In cold climates its costs more to run machinery, either by steam or water, than in a warm climate. The cost of keeping a building warm in winter is more than keeping one cool in summer. Also, a close room kept warm and full of men at work is injurious to health, as the atmosphere in the room becomes vitiated and full of carbonic acid gas, which destroys the energy of the operatives to some extent, causing them to feel drowsy and enervated, and will destroy their lives in the course of time. It costs the operative more to live in a cold than in a mild climate. In the South the mills can be opened to some extent, and the operative can get pure air to breathe, which can be cooled if necessary; this cooling process can be done at less cost than heating in a cold climate. I think you will find very little difference during the same months between the climate of Middle Georgia and the climate in New York State, the principal difference being in the length of the season.

There is another thing, also, in reference to earnings of the mills of the South and the North. Most mills of the North have large capital invested and use large power units, which is always sure to lessen the cost of production. Mills in the South have small capital and use small power units, which increases the cost of production. It seems to me that the most accurate way of learning which section of the country is now paying the best in the manufacture of cotton goods is to take the interest on the capital invested and the gross interest, and take into consideration the size of the plant, and see which is doing the best.

I know of a little mill here in the State of Georgia that has only about 5,000 spindles and only $75,000 invested that is paying 50 per cent. dividends. I am not interested in any cotton factory in the South. If I were I might advise you not to come South, as I then would not want competition, and would be pessimistic in my views, as many men in the South are, and would say, as they do, that the South is not the place for the cotton mill. But I would stay here just the same, and try to keep others away.

There are more hands to the 1,000 spindles in the South than in the North. There are several reasons for this. One is, there are more children employed in the South than in the North, and the mills also make coarser threads than they do in the North. Also the labor in the South is new at the business and inexperienced, and in many cases management and executive ability are lacking, as well as practical experience. The number of operatives per 1,000 spindles in the South has decreased to some extent, and is still on the decrease, and it will continue to be so as we have more experience, better and more improved machinery, make finer threads and have more capital. All the South needs is capital and men to use it, and we can control the entire cotton manufacturing interest of the world. FURLOW HOLT.

MR. W. D. CHIPLEY, president of the board of delegates to the Nicaragua Canal Convention which was held in New Orleans on the 30th of last November, has issued a circular in which he says: "Recognizing the importance of this enterprise to the entire South, especially to the State of Florida, you are invited and earnestly urged to send delegates to a convention to be held at Tallahassee, Fla., at 5 P. M., after the ceremonies of the inauguration of Governor Henry L. Mitchel, on Tuesday, January 3, 1893." Mr. Chipley gives the proper instruction as to the appointment and number of delegates, and the authority of the chairman of each county board of commissioners. The action of the convention will be presented to Congress without delay.

THE capital invested in West Virginia banking institutions, including State and national banks, as shown by the recent report of the State bank examiner, is $5,017,486.48. The aggregate deposits were $15,161,544.97, an increase of $1,567,391.77 over 1891. The increase in State banks is $1,045,186.45 and the national banks $522,205.32.

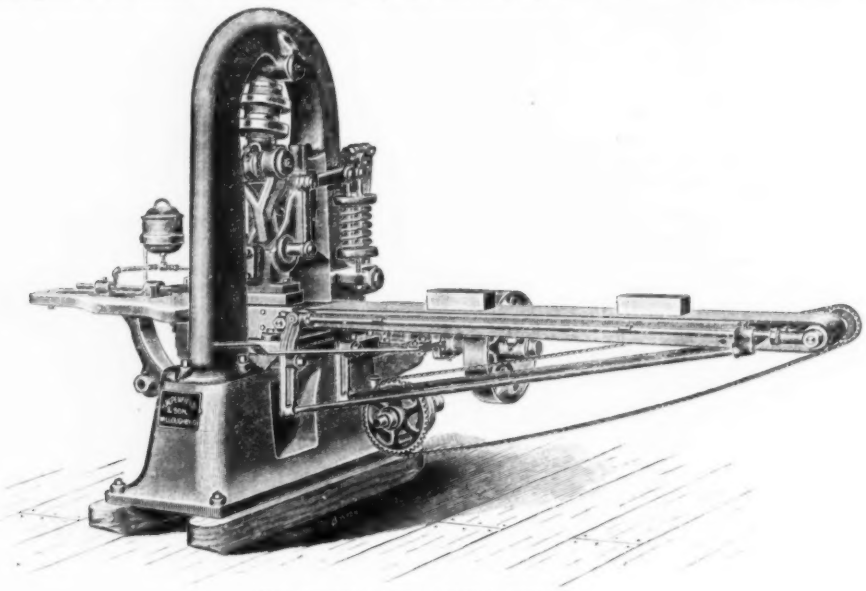
MECHANICAL.

Brick Repressing and Represses.

While the repressing of bricks has for a number of years been practiced by manufacturers wishing to produce a high grade of front brick, the process did not come into anything like general use until at a comparatively recent date. Of late, however, the repressing of bricks has become quite general, both with manufacturers of paving and building brick, and the hand presses at first introduced have been largely discarded and replaced by power presses of increased capacity, comparatively economical to operate and capable of exerting an augmented amount of pressure.

The advantages of repressing, when one comes to analyze it carefully, are certainly numerous and attractive. At a trifling expense one can secure greater uniformity of ware and greater market value for his product; the expense of repressing is so slight in proportion with the increase in value of the product that the percentage of profit is perceptibly multiplied; added density and strength is secured, making the process trebly advantageous to paving brick manufacturers, while any brick manufacturer can at the same operation have his trade-mark and address stamped clearly on each brick, thus making each brick a valuable advertising medium. Furthermore, some popular patented forms of paving brick must necessarily be repressed to secure the desired shape and configuration.

The accompanying illustration represents the Penfield No. 2 power repress, made by Penfield & Son, of Willoughby, Ohio, which embodies in its design, construction and operation many noteworthy and advantageous featues commending it to the better judgment of the trade. The manner of operation of the machine may be briefly described as follows:



THE PENFIELD NO. 2 POWER REPRESS.

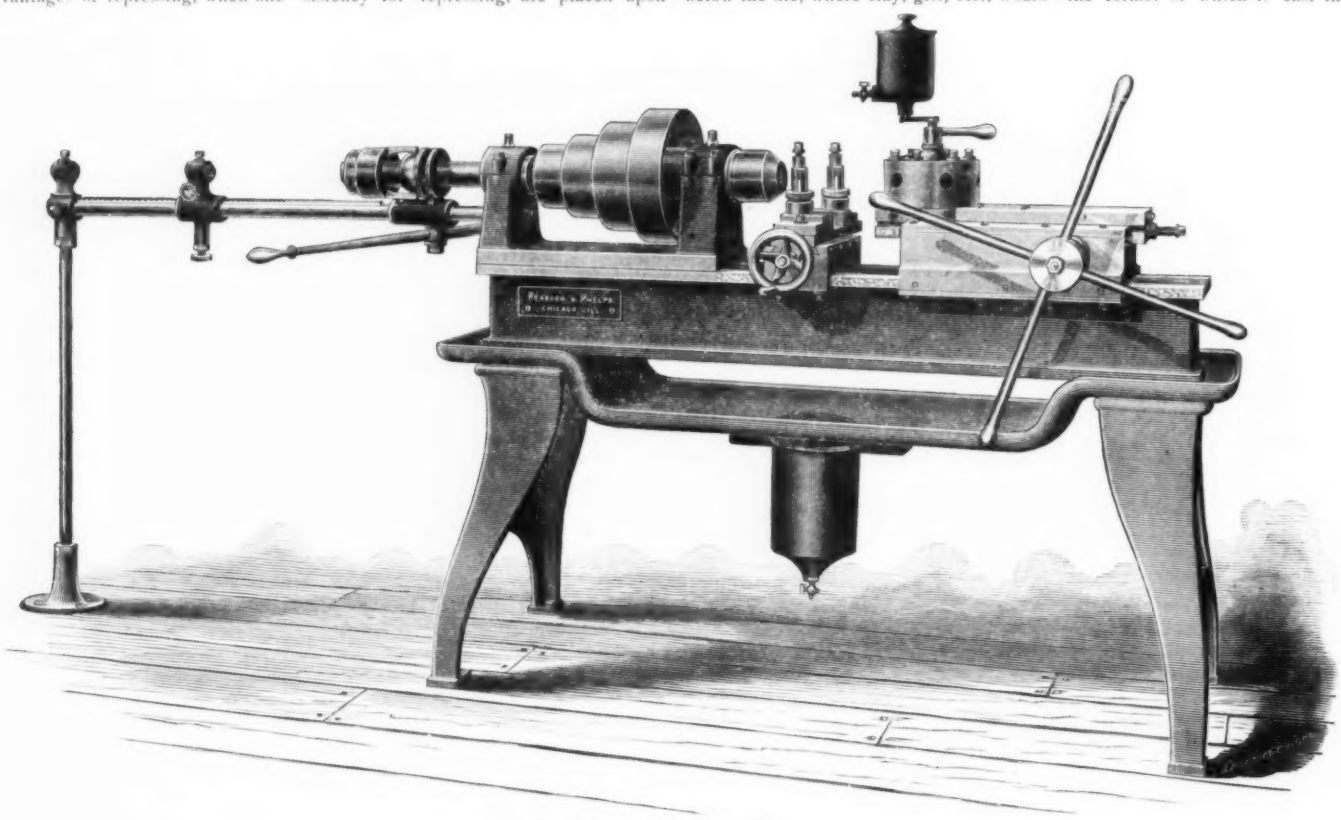
The brick, when of the proper consistency for repressing, are placed upon the feed-table of the repress and forced automatically by the feeding mechanism into the die. The brick are pressed from above by means of the powerful toggles operated by a walking beam (not shown in the cut) at the side of the press. The pressure can be regulated as desired. The reverse movement of the pressing mechanism expels the brick from the die, and the next brick to be pressed is automatically pushed forward, feeding it into the die and forcing the brick just pressed on to the off-bearing belt, which can be arranged of any convenient length. As the brick reach the end of the off-bearing belt they are transferred by hand to trucks, barrows or cars preparatory to conveying to the drying department.

The Penfield repress is of approved design, massive and strong. Its weight exceeds that of any similar press on the market, and this surplus weight is placed where it will do the most good. The die is carefully fitted up and can be readily removed and replaced with one of different size or shape. The toggle joints exerting the pressure are above the die, and less subject to friction and wear than if placed below the die, where clay, grit, etc., would be apt to fall and interfere with the free operation of all parts. The bearings in the toggle joint are arranged with renewable, hard-metal bushings. A special clutch pulley is provided, placing the machine under the immediate control of the operator, so that he can start or stop it instantly.

The Penfield power repress has fewer parts than any other upon the market, securing increased freedom from complication, and making it easy to keep in running order and repair. Its operation is perfect, its strength and power unquestioned, and it embodies all essential characteristics for success. The power required to operate it is very light, not to exceed one-half to one horse-power, and it will press 10,000 brick or blocks per ten hours.

Turret-Head Screw Machine.

The machine shown in the accompanying illustration is a new combined turret lathe and screw machine designed and built by the firm of Pearson & Phelps, of Chicago. As can be seen, this machine is made of unusually heavy design to meet the approval of manufacturers who desire to do heavy work upon the turret-head lathes. The spindle is made of tool steel and has a 1 9-16 inch hole through it. The front bearing is three inches in diameter and four and three-quarter inches long. The machine shown in the cut is provided with a wire feed, but it is so constructed that it can be furnished with or without wire feed, automatic chuck, plain gear or geared friction head. There are a number of other new and ingenious features in the machine, all of which add to its working qualities and general adaptability.



TURRET-HEAD SCREW MACHINE.

Barnes Friction Clutch Pulleys.

The accompanying cuts represent the principles of one of the latest improvements in the line of friction clutch pulleys and cut-off couplings manufactured by the J. H. & D. Lake Co., of Hornellsville, N. Y.

Fig. 1 affords a sectional side view of the Barnes screw lever friction pulley in released position, showing the driving hub keyed to the shaft.

Fig. 2 is a sectional end view describing the friction hub encircled by friction ring, the former of which is cast in one solid piece with the pulleys. Projecting lugs on opposite sides of the driving hub of the ring drop into lugs, or lug cavities, of the friction ring, and when the clutch is on these lugs take all the driving power. This is an improvement over the old bolt-fastening system, the bolts of which are more liable to be affected by the twisting strain upon the hub from the friction of the clutch. At the extreme top and bottom of

Fig. 2 is shown a view of a simple device which evades the use of much complicated machinery and more than substitutes the corresponding complex parts of some previous inventions. It is a lever nut on each side of the friction ring, one-half of the nut being cut with a right thread and the other half with a left thread. Sufficient space between opposite sections of the ring is

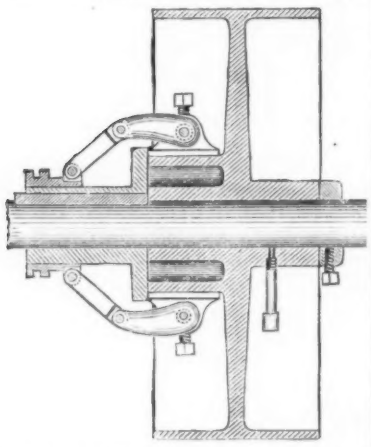


FIG. 1.—BARNES FRICTION CLUTCH PULLEY.

given for contraction or clutch, which is effected by means of right and left thread screw bolts entering the lever nut from opposite sides, secured by set screws. Duplex levers are attached to these nuts at their upper section and to the hub at their lower section. When the shipper sleeve is thrown against the flange by the operating lever the duplex lever turns the nut sufficiently to produce a friction that was

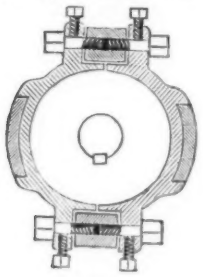


FIG. 2.

never known to lose its grip, nor has a thread of these screw bolts ever been known to break. The screw bolts are adjustable to any desired pressure, however, in case the clutch should ever become lax. They give the pulley a positive grip and absolute release from the hub by each opposite shift of the operating lever without the use of springs. The Barnes screw lever friction clutch pulleys and cut-off couplings are adapted to both heavy and light work.

Stafford Quotation Cabinet.

One of the most useful fixtures which can be placed in an office is a letter file, which allows easy and quick reference to letters on any subject. Price quotations are the easiest things to forget, and when filed under the name of the sender one cannot always remember this, and a long search is necessary. The quotation cabinet shown in the accompanying illustration has been made by the E. H. Stafford Co., of Grand Rapids, Mich., with a view of simplifying this by filing under subjects. It is unnecessary to remember the name of the person or concern giving quotations. All that is needed is the name of the article on which prices are wanted or the subject upon which information is desired. The cabinet shown in the illustration contains six trays, and each tray has forty divisions, which are numbered. A movable index card in each tray also bears numbers the same as those on the division leaves, and on this card, which can be easily slipped from its place for that purpose, are written the names of the article or subjects about which information is filed. This method of filing documents, papers and special information of any kind is invaluable to the business man, as it puts the matter exactly where he wants it and in convenient form. When the trays become full they can be readily removed and new indexes inserted in place of them. These quotation cabinets are handsomely finished from selected oak. Five sizes are made, two, four, six, nine and twelve trays, respectively.

THE STAFFORD QUOTATION CABINET.

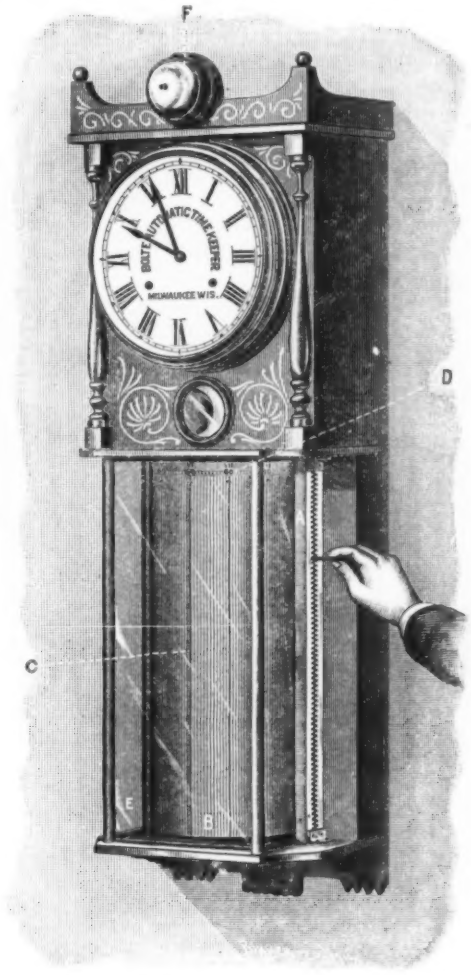


FIG. 1.—THE BOLTE AUTOMATIC TIMEKEEPER.

The Bolte Automatic Timekeeper.

The Bolte automatic timekeeper is a new device for keeping accurately a record of the time of arrival and departure of employes. Cut No. 1 shows the complete detail with the clock dial and the hand making the registration. Cut No. 2 shows a section of the upper part of the record sheet. The cylinder around which this record sheet moves turns in time with the hour hand, making one revolution every twelve hours. The heavy line marked seven o'clock indicates the hour at which the workmen are expected to arrive. The numbers recorded on the left of this line are early, whereas those on the right are late. Each of the light-colored lines indicate five minutes; therefore anyone registering three lines to the right of the seven o'clock line would be fifteen minutes late; and as the proprietor enters his establishment in the morning, one glance at the clock will indicate just those employes who are late or absent, and how many minutes they are behind time.

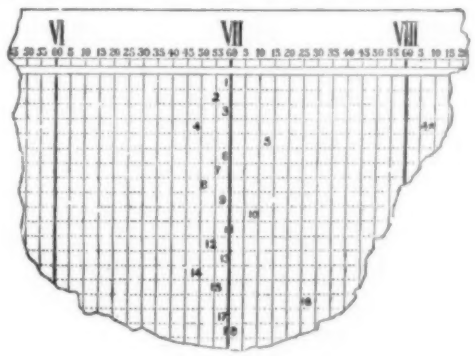


FIG. 2.

Cut No. 3 shows a section of the key rack through the openings of which the registrations are made. Cut No. 4 shows the registering key full size. Each workman draws his pay according to a certain number, and in this case the one shown is No. 75. This number appears in raised letters on each end of the key, the end marked "in" being nickel, the end marked "out" being of copper. The indication of an employe registering "out" is shown by

FIG. 3.

a star (*) being placed after the number, thus 75*.

The value of this device is self-apparent. Each workman makes his own registration and cannot complain of the timekeeper. No collusion is possible between timekeeper and employes. By actual use it has demonstrated the fact that employes are much less liable to be late, as by the use of the Bolte automatic timekeeper not only the workmen themselves are able to inspect the record, but their employers are able each day at a glance to ascertain the numbers and names of those who are arriving on time or others who are habitually late or absent. The device will be placed on the market by the National Time Recorder Co., 361 and 363 East Water street, Milwaukee, Wis.

FIG. 4.

In a letter to the statistician of the Maryland bureau of labor statistics Col. Marshall McDonald, the United States fish commissioner, says that the returns from the Maryland oyster industry show that in 1880 there were 13,748 persons engaged and $3,928,376 capital invested, the production being 10,600,000 bushels valued at $4,730,476. In 1890 there were 20,481 people employed in the business and $4,208,805 capital invested, while the production was 10,450,087 bushels valued at $4,854,456. In 1891 32,104 people were engaged and $6,697,302 capital invested, the output amounting to 9,945,058 bushels valued at $5,295,806. From this it is seen that 771 bushels per person were caught in 1880, 510 in 1890 and 309 in 1891. The value per bushel in 1880 was 44.6 cents, 46.4 cents in 1890 and 53.2 cents in 1891, while the value per person engaged in the business for the year was $343.86 in 1880, $236.64 in 1890 and $164.38 in 1891. The amount of capital invested in the business per bushel caught in 1880 was 37.6 cents, 40.2 cents in 1890 and 67.3 cents in 1891.

Some of Chicago's Great Manufacturing Plants.

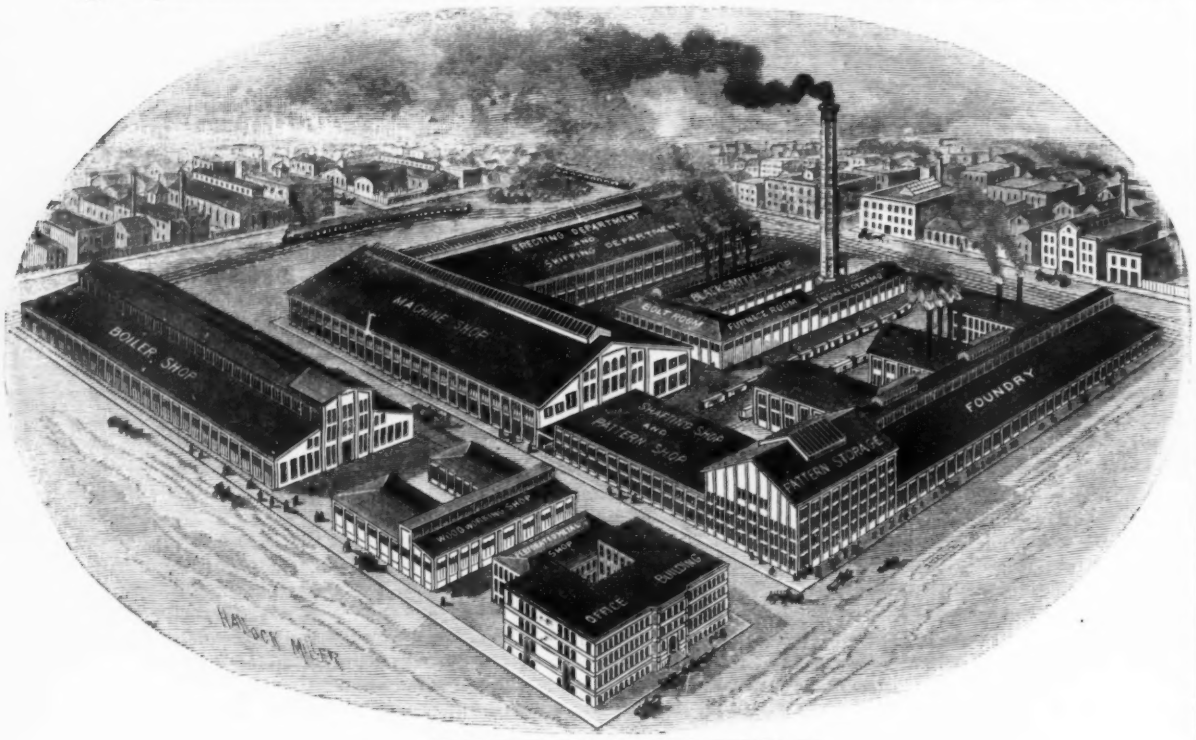
OFFICE OF MANUFACTURERS' RECORD, 535 THE ROOKERY, CHICAGO, December 17.

The phenomenal growth and enterprise which characterize Chicago are not limited to the immense sky-scraping office buildings and great mercantile establishments, to say nothing of that stupendous undertaking of its people, the Columbian Exposition. Probably Chicago is best known as a great commercial city, and that it is not more generally regarded as a manufacturing centre is not due to smallness of its industrial interests, but rather to the fact that they have grown so rapidly and within such a comparatively short time that the world has not yet had time to learn of them. There are, however, a number of great manufacturing establishments in Chicago which are well calculated to astonish people by their immense proportions. So remarkable has been the growth of these interests that illustrations and a brief description of a few of the more recent plants will be of general interest.

Noteworthy among the latest of Chicago's great manufactories is the immense plant now approaching completion which is being erected by Fraser & Chalmers, manufacturers of mining machinery, steam engines and boilers, cable railroad machinery and other engineering specialties. Apart from the magnificent proportions of this plant, one of its features which attracts the most attention and is of the greatest interest is the use of sub-divided power transmitted by electricity from one central station to various parts of the establishment. Each machine is driven by a separate motor, which is under the control of the operator. The special advantage of this system is the great saving of power usually lost in transmission by belting and shafting. Although this method of power transmission has been more or less used and with much success in the East, its use has never before been attempted in this country on so large a scale as in this plant, and it is safe to say that many other new plants will soon follow in the adoption of a similar system of electric power.

The completed plant of Fraser & Chalmers will include some fifteen large shops. Of these special mention might be made of a foundry 400 by 154 feet with a large annex and equipped with six cupolas and seventeen electric cranes, the largest of which has a lifting capacity of twenty-five tons. The boiler shop is 400 by 133 feet and has thirteen large cranes and three hydraulic riveting machines. The machine shop is 255 by 160 feet; erecting shop 210 by 100 feet, and shipping department 240 by 50.

These shops are located at Twelfth and Rockwell streets and on the line of the Chicago & Northern Pacific, Chicago & Northwestern and Pan-Handle roads, and are easy of access to vistors by street cars and suburban trains. Similar works are being erected at Erith-on-Thames, near London, Eng., and these, together with their new plant in Chicago, will not only increase their capacity to about six times what it has been in the past, but make them many times the largest manufacturers of mining machinery in the world.



PLANT OF FRASER & CHALMERS, CHICAGO, ILL.

Another of the great modern manufacturing plants in Chicago is being erected by foreign capitalists, who have chosen Chicago for the American headquarters of their company. The great electrical manufacturing company of Europe, Siemens & Halske, who have factories in Berlin, Charlottenburg, Vienna and St. Petersburg, recently decided to establish in America an industry similar to that which they have built up in Europe. With this end in view, they secured the co-operation of Messrs. O. W. Meysenburg and Aug. W. Wright and commenced the erection of complete shops in Chicago, where they propose manufacturing all types of electric lighting, power and signal devices.

They have already erected near the junction of South Wood street and Blue Island avenue, on the West Side of Chicago, two buildings, each occupying a ground space of 200 by 200 feet, and which are practically but one structure, for machine shops. The construction of these buildings is of brick, with an iron trussed roof. One of these buildings has side galleries divided off into offices, drafting-rooms and store-rooms.

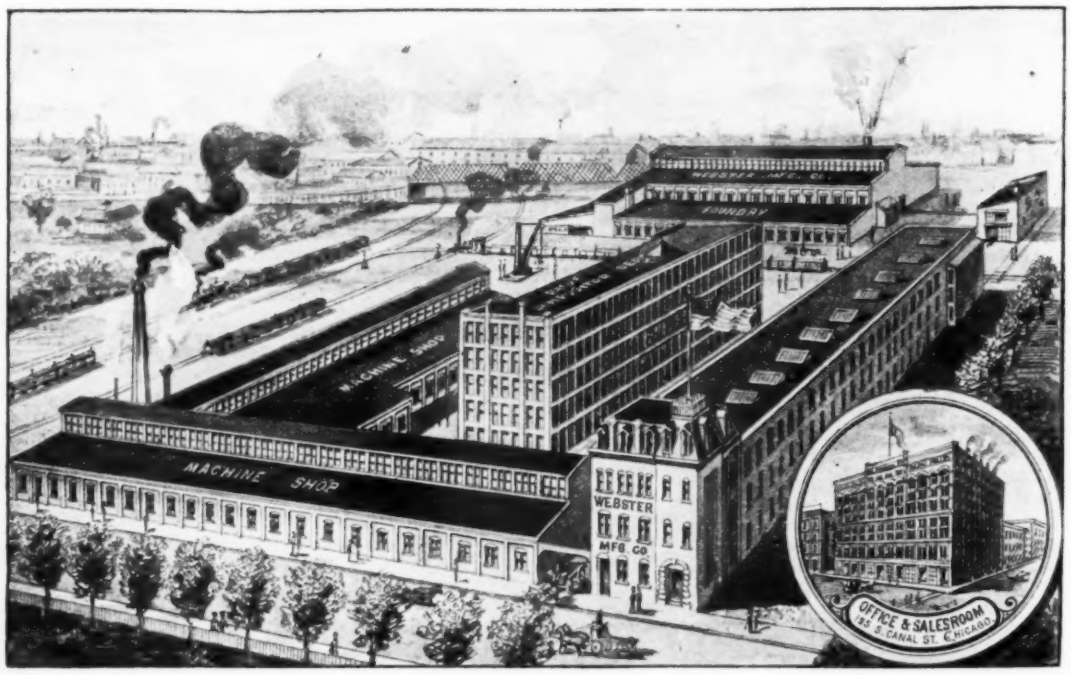
The buildings are equipped with electric traveling cranes of ten and five tons capacity each. The tools in these shops are of the very latest design, and come from such well-known makers as the Niles Tool Works, Bement, Miles & Co. and Lodge & Davis. The cranes are manufactured by the Morgan Engineering Co.

The works are run entirely by sub-divided motor installations, which gives a practical illustration of the great economy that can be obtained in machine shop practice by distributing and isolating power throughout the building with the use of motors. The current for operating these motors is generated in the power department from Heine safety boilers, with Lake Erie compound engines, with direct coupled Siemens & Halske slow-speed generators. Every convenience known to modern machine shop practice has been taken advantage of in the construction and equipment of these buildings, it being the desire of Messrs. Meysenburg and Wright to establish the nucleus of the most modern and best equipped manufacturing shops in this country.

The buildings are warmed by air, which is heated by being driven from Sturtevant blowers over nests of steam pipes, which are erected in the boiler-room above the level of the tops of the boilers. The hot air from these nests is conducted through large galvanized iron pipes and distributed throughout the building. A feature of these shops is the perfect lighting arrangement, the roofs presenting quite a unique appearance in this respect. Sidings from the adjoining belt line railroad lead directly through each building, offering the most perfect shipping facilities, as the very heavy apparatus which this company constructs can be handled direct by the traveling cranes and placed on cars with a minimum amount of labor. The present shops have a capacity to work about 750 men, but extensions are already being designed which will give employment to at least 5,000 men.

Although the company is but a few months old, it has sold through its sales department, in charge of J. Holt Gates, twenty-two dynamos ranging in power from 100 up to 600 horse-power and aggregating in the total 10,000 horse-power.

The Webster Manufacturing Co., founders and general machinists, whose office is at No. 195 South Canal street, have one of the best modern plants in the city of Chicago at 1075-96 West Fifteenth street.

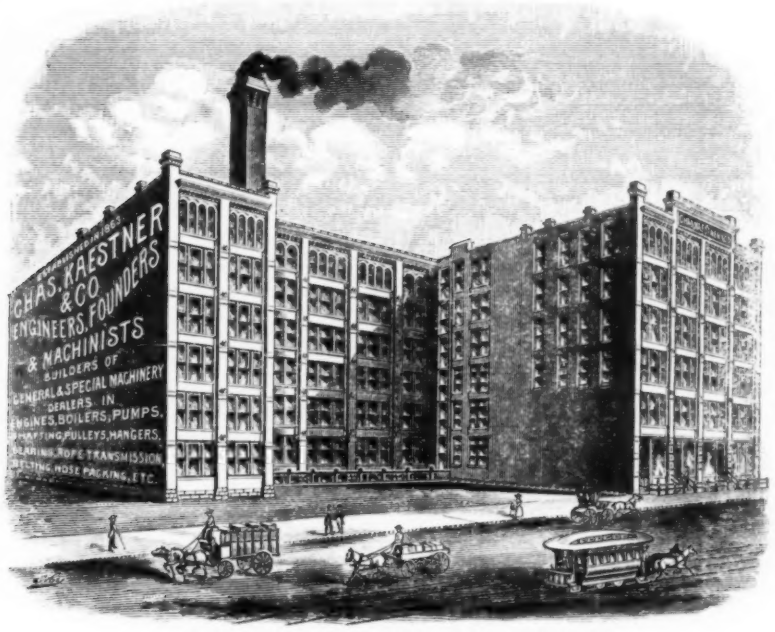


PLANT OF THE WEBSTER MANUFACTURING CO., CHICAGO, ILL.

This plant covers two acres of ground, and is devoted to the manufacture of shafting, pulleys, steel-plate friction clutches, elevating and conveying apparatus, and all the necessary machinery and appliances needed for the complete equipment of grain elevators, cottonseed-oil mills, etc. They are also the sole manufacturers of the Lewis gas engine and other patented spe-

cialties, one of which is a system of rope transmission with which they have equipped their own plant. In this, as in the Fraser & Chalmers plant, crude petroleum is used for fuel. Power is supplied by a Bullock-Corliss engine for the machinery, and a Buckeye engine drives the generators, which suppy 600 incandescent lamps. In this works may be seen the largest hydraulic press in Chicago.

The arrangement of the departments in this plant constitutes one of its best features. The illustration does not show a new five-story machine shop 48 by 150 feet, which, with the other machine shops, contains in the neighborhood of 500 machines. The dimensions of the other buildings are as follows: Sheet metal building, three stories, 229 by 64 feet; fire-proof pattern vault 24 by 62 feet, drafting-rooms 36 by 64 feet, foundry 120 by 36 feet, machine shops 256 by 66 feet, engine-room 48 by 30 feet, boiler-room 38 by 32 feet, blacksmith shop 66 by 28 feet. Five hundred men are now employed in this establishment, and the number will soon be increased to about 800.



PLANT OF CHARLES KAESTNER & CO., CHICAGO, ILL.

Charles Kaestner & Co., who have been located for many years at No. 303-311 South Canal street, have recently moved into their new plant on South Jefferson street, a compact and substantial building six stories in height in the thickly-settled manufacturing portion of that locality. This building is L-shaped, the main portion being 186 by 100 feet and the wing 100 by 100 feet. The power plant occupies a separate building 50 by 100 feet, and contains a 300 horse-power Corliss engine. An Edison electric plant furnishes ample light, and there are passenger and freight elevators connecting the sixth floors. Charles Kaestner & Co. were established in 1863, and are manufacturers of machinery for breweries, paint mills, malthouses, distilleries, etc., besides a full line of machinery for the transmission of power.

CLARENCE P. DAY.

The Mathieson Alkali Works.

In the early part of September a charter was granted to the Mathieson Alkali Works, of Saltville, Va.; E. E. Arnold, of New York, president; Geo. W. Palmer, of Saltville, Va., first vice-president; R. T. Wilson, Jr., of New York, second vice-president; C. H. Bosher, of New York, treasurer, and W. P. Robinson, of Brooklyn, N. Y., secretary. Since that time the company has been quietly getting its organization and plans in shape. A number of prominent New York and New England people have become interested and an abundance of capital provided. The cost of the property, which was purchased from Geo. W. Palmer, first vice-president of the new company, is said to have been $1,000,000. The capital stock of the company is $2,500,000. The property owned contains several square miles of land in and around Saltville, Washington county, Va. During the war the extensive salt deposits here, lying only from 150 to 200 feet under ground, supplied a large portion of the salt used in the South, and have been worked on a small scale ever since. This new company will erect extensive works, costing nearly $1,000,000 and having a capacity of 50,000 tons soda-ash and bleach per annum. About 700 workmen will be employed, and the wages are estimated at nearly $300,000 per annum.

This is an exceedingly important industry for Virginia and the country at large. Soda-ash is an important item in the manufacture of glass and soap, in cloth bleaching and many other industries. As fuel can be secured for a moderate price, the climate is all that can be desired and there is an abundance of pure water, good glass sand and other natural resources in this section of the State, there is no doubt but that these works at Saltville will form the nucleus of an extensive manufacturing district. The benefits from it will be widespread, and advance the interests of every branch of business.

At present the manufacture of sal-soda and soda-ash in this country amounts to only about one-third the consumption, the total production being in the neighborhood of 200,000,000 pounds per annum. In 1882 the imports of soda-ash and sal-soda were 293,189,955 pounds, valued at $3,531,693, and in the same year the imports of all salts of soda amounted to 361,608,752 pounds, valued at $4,951,515. In 1891 there was imported 354,744,335 pounds sal-soda and soda-ash, valued at $4,382,917, and in that year the total imports of all soda salts was 448,429,458 pounds, worth $6,392,054. This shows that the consumption is steadily increasing, and the figures are made even more striking when it is known that during this same period the production of the works operating in this country steadily increased.

Before chemical knowledge came to the aid of the manufacturer, soda was made by leaching the ashes of plants and evaporating the dilute solution thus obtained. In or about 1790 Leblanc perfected a process dependent upon the chemical reaction which takes place between salt (chloride of sodium) and sulphuric acid. This consisted in treating salt obtained from brine with strong sulphuric acid, driving off the chlorine as hydrochloric acid and leaving sulphate of sodium. This in turn was mixed with powdered limestone (carbonate of calcium) and coal and calcined until partly fused. By this means the sulphuric acid was liberated and combined with the limestone, forming calcium sulphide, and the carbonic acid of the limestone combined with the sodium, forming carbonate of soda. This mass was then leached with water, the carbonate of soda dissolving, while the calcium sulphide, which is insoluble, was separated from the solution by filtration or decantation. The solution was then evaporated and sal-soda produced. This process has been in use for many years, and by it the greater part of the soda-ash and sal-soda of commerce has been made. Another process, which had a hard fight to start, but now bids fair to entirely supersede the Leblanc, is known as the "ammonia-soda" method. Essentially this is based upon the double decomposition which takes place between ammonium acid carbonate and sodium chloride in concentrated solution. In this the reaction changes the ammonium carbonate to ammonium chloride and the salt from sodium chloride to sodium acid carbonate. This latter, which is but slightly soluble, is precipitated, collected and converted into the neutral carbonate by the action of heat. The carbonic acid driven off is utilized in the preparation of a fresh quantity of ammonia carbonate, and the other portion of carbonic acid required for this purpose is secured by the calcination of limestone (calcium carbonate), which also yields the lime necessary to decompose the ammonia chloride so as to free the ammonia. By this means the only by-product remaining is calcium chloride. Still another process, though having but a limited application, is in making the sal-soda from cryolite, a mineral found in Greenland, and consisting of a double fluoride of sodium and aluminum. This is done by lime, the reaction leaving fluoride of calcium and aluminate of soda. The latter is treated with carbonic-acid gas, which combines with the soda and precipitates alumina. The ammonia-soda process, as outlined, has been improved on in many features, notably at the Solvay works, Syracuse, N. Y., and is extending in use, as it is said to be much the cheaper method of the two. It is not known which process will be adopted at Saltville, but possibly on account of cheap fuel the Leblanc will be used.

Some of Atlanta's Strong Points.

By Col. I. W. Avery.

Atlanta is especially strong in educational facilities.

She has an unsurpassed system of public schools for white and black.

She has one of the best female colleges, run by Miss Leonora Beck and a dozen or two professors. Miss Beck came here a stranger but a year or two ago, a society young lady of one of our best Georgia families, full of genius for scholastic creative administration, and has built up a phenomenal institution by her wise and original methods. She is thorough, deep, broad and scientific, wins love, stimulates ambition and believes in physical culture.

Like Miss Beck's college for girls, Professor Meagley's Gordon Institute for boys is a model institution, handled on the highest possible plane, finely disciplined, comprehensive in its curriculum, complete in its tuition, and up to the best results of the most advanced education.

Professor Collonge's School of Languages affords every facility for the study of all the tongues that an accomplished linguist desires.

The business and shorthand colleges, with their departments of typewriting, are complete and of a high grade, and turn out hundreds of male and female bookkeepers, accountants, stenographers and typewriters to fill the innumerable positions daily demanding skillful and accomplished workmen and workwomen.

The medical and law advantages are equally varied and valuable, one female and three male colleges to turn out doctors and doctresses being in full and prosperous operation, grinding out excellent graduates by the quantity.

The colored universities are unequalled in the whole country, with large, commodious buildings, full and able faculties, extensive grounds, fine groves, varied libraries and apparatus. One theological seminary and three literary and business universities for both sexes, and one great special institute for females, furnish to the colored people the most comprehensive educational opportunities.

But the educational glory of Atlanta is her imposing, well-equipped and well-managed State Technological Institute, under that prince of preachers and college presidents, Rev. Dr. L. S. Hopkins and a fine faculty. This invaluable institution is making scores of Southern engineers, railroaders, miners, factory superintendents, electricians, wood and ironworkers, farmers and other practical men. It is bringing the South to the front in substantial culture and scientific training, connected with the momentous material callings of the practical world.

It will be seen that Atlanta is a swarming hive of educational shops of every kind, from the classic to the practical, and can equip all classes with requisite culture from the literateur to the hand bread-winner, through every gradation of toil by brain and body.

I have not referred to the art and music schools, of which there are numbers of the best.

Atlanta is noted as a large medicine centre. Apart from such extensive wholesale drug establishments as Jacobs's Pharmacy, the Lamar-Rankin Drug Co., the Westmorel & Crawford Drug Co. and others, supplying large areas of the South with medical stores, and the numbers of retail apothecaries that purvey local medicaments and healing to the city and its multiplied environment of populous suburbs, Atlanta is a remarkable and prolific patent medicine headquarters, and the focal point of a host of valuable sanitary institutions.

No city of the Union has been the home and nursery of so many successful medicines. The potential Indian blood purifier, the triple "S"—S. S. S.—has its headquarters and a tall laboratory here, from which it travels the world. "Coca Cola," a nervine tonic, palatable and inspiriting, is dispensed from the myriads of soda fountains, and revives the weary and braces the flagging nerves to sustained effort. It is a successful Atlanta institution. The "Female Regulator," "Lemon Elixir," "B. B. B." and a squad of other prosperous and popular medicaments have been born and are made here and sold broadcast.

There is one well-patronized concern here, not seen elsewhere, that flourishes luxuriantly and is a money bonanza. The soda founts dispense sherberts, ice creams, bouillions, chocolates, coffees, mineral waters and every species of hot and cold drinkables, both pleasant and nourishing. The patronage is immense.

Atlanta is the gathering place of health institutions. The "Keeley Institute," to cure intemperance, has a prosperous branch in a handsome building, and scatters its benefactions widely and successfully. So does Dr. B. M. Woolly's Opium Cure and Dr. J. W. Nelms's Opium Remedy, both Atlanta institutions. Robertson's Sanitarium and Boland's Surgical Institute are old establishments.

THE Alabama Iron & Steel Co. intends adding to its rolling mill at Brierfield machinery for the manufacture of railroad spikes.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on page 430.]

Our Remaining Hardwood Resources.

[Extracts from an article by Charles Mohr in the *Engineering Magazine*.]

The ever-increasing demands upon our timber resources, resulting already in their exhaustion in many sections east of the Mississippi, must soon force upon the public mind the question of forest protection. This question has a bearing not only upon the interests of a large class of our population who are dependent directly upon the timber industry, but upon the general welfare. A century ago forests covered the eastern part of the United States, with but little interruption, from the Atlantic slope to the Mississippi, but they speedily dwindled before the settler's axe. None of the natural resources of the country have been levied upon with a more relentless energy. Capital and labor found a wide field here ready to be yielded to whoever claimed it. There was too much promise of speedy returns not to appeal to a ruthless spirit of greed and speculation, having no regard for the future. Even within the last twenty years the despoliation of our forests has been carried on with an almost feverish activity. The work of destruction has even exceeded the economic needs of the people, for under the high pressure of competition, stimulated by abundant capital and improvements in mechanical skill, the timber industry has reached the point of overproduction liable to result in commercial and financial depression.

The value of the products derived from our forests far exceeds that of the exports of all commodities from the United States, including coin and bullion. In 1880, according to the census reports, this value was $700,000,000. It may safely be assumed that complete returns, could they be had, would show the amount of material from the forests consumed annually to exceed a thousand million of dollars. The consequences of such gigantic operations are making themselves painfully felt in regions the timber resources of which were regarded as inexhaustible. Such localities are suffering not only from want of timber, but also from injuries connected with the diminution of the forest area below the requirements for the maintenance of favorable climatic conditions. According to official statements the forest area in Ohio was reduced from 53 per cent. of the whole area of the State in 1850 to 17 per cent. in 1880, and in Indiana the forest area declined in the same time to 19 per cent.

North of the Ohio river the black walnut and white ash can be said to be extinct, as far as practical purposes are concerned. On the Atlantic slope the forests of white pine in Pennsylvania have been almost completely stripped of their timber. In New York and the New England States this pine has almost hopelessly disappeared, with the exception of Maine, where, under a wise system of protection, the second growth is of great promise and already contributes considerable supplies.

The most extensive and alarming instance of despoliation of timber wealth is presented in the immense pineries of the Northwest. The amazing activity with which this industry is carried on in the pine-lumbering regions of Michigan, Wisconsin and Minnesota can be realized from the statement of the *Northwestern Lumberman* that the amount of lumber produced in 1889 reached the aggregate of 8,305,833,277 feet (board measure), to which may be added the output of shingles, 4,698,975,800 pieces, swelling the consumption of white pine lumber from that section to fully 9,000,000,000 feet in one year. The amount of merchantable white pine standing in Lower Michigan is estimated in the census reports of 1880 at 29,000,000,000 feet; during the subsequent ten years it has been reduced to one-tenth of that amount, according to the Chicago *Timberman*.

With this increasing scarcity of timber in general, and the impending exhaustion of the white pine north of the Ohio river, the lumbering interests of the Eastern United States are gravitating toward the South Atlantic region. Scarcely any attempts have been made to arrive at estimates of the different kinds of hardwood timber standing. It is known certainly that in the Southern States every variety of hardwood occurs that is found in the North, besides several other kinds of economic importance peculiar to the Southern flora. Among the States south of the Ohio river, West Virginia takes the first rank in wealth of its hardwood forests. Only 25 per cent. of its area has been cleared of them. Nowhere is black walnut more frequently found. Nowhere is wild cherry, ash, white oak, chestnut oak or tanbark oak more abundant. It is only in the narrow strip along the watercourses that these supplies have been largely removed, and only in the more accessible parts that they have been more or less culled. By the tenth census it was estimated that 2,500,000,000 feet (board measure) of yellow poplar timber are yet standing in the valley of Cheat river and its tributaries and 300,000,000 on Shavers fork, besides large quantities of the valuable timber trees named, which cannot be driven in the shallow streams. On the upper part of the Little Kanawha river and its tributaries there are large supplies of white oak yet untouched; in fact, all the country back of the counties fronting on the Ohio river is one vast virgin forest of oak, tulip, wild cherry, black walnut and sugar maple. There is but scant information at hand relating to the increase of the industries based upon the timber resources of West Virginia. The output of the saw mills in 1886 amounted to only 4,000,000 feet (board measure), and these were situated chiefly at Parkersburg and Ronceverte.

In the report of the forestry division of the Department of Agriculture for 1887 the area of Kentucky covered by forest is stated at 30 or 35 per cent. White oak is the timber most prevalent and characteristic of the State. Large tulip trees and most of the valuable hardwoods are found in greater or less abundance in the forests of various sections of the State, and in Eastern Kentucky and the region of the Cumberland mountains are yet practically untouched. In a report made by R. C. B. Thurston, made to the president of the Louisville & Nashville Railroad in 1887, it was stated that the hardwood forests of the valleys and tablelands of the Cumberland mountains extend over an area of 4,000 square miles, with a stand of timber running from 6,000 to 14,000 feet (board measure) per acre. The 2,319 establishments of the State based upon them in 1885 were using material valued at $14,576,014, with products valued at $29,446,339. The lumber produced from oak and tulip trees by 805 saw mills this year was estimated at $4,889,196.

Tennessee, with 60 per cent. of its area still covered by woodlands, possesses a larger proportion of forests of deciduous-leaved trees than any other State. The commissioner of agriculture of that State, at the meeting of the Southern Immigration Association in 1884, stated that 16,000,000 acres of forests in Tennessee remained in almost their original condition. Portions of the State are unsurpassed in quality and the vast quantity of white oak and tulip timber they possess. In Obion county alone there were in 1887 fifty-five saw mills with a daily output of 1,000,000 feet of the latter. Tulip trees from six to seven feet in diameter are not rare. No State has yet a greater quantity of black walnut. Excellent hickory abounds. Blue and white ash, scarce along the highroads of communication, are yet found in considerable quantities in the remoter districts. In the lowlands along the Mississippi river red gum, purple gum, cottonwood and cypress prevail. The total production of hardwood timber of Tennessee amounted in 1887 to 271,000,000 feet.

In the mountainous part of Western North Carolina are found virgin forests of the most valuable hardwood timbers which have only become accessible during the last few years. The tablelands between the Blue Ridge and the Smoky mountains and the basin of the Tennessee river bear a heavy and diversified hardwood growth.

In the Atlantic States further south and in the Gulf region the hardwood growth is confined to the higher level sections. In Alabama the hardwood timber trees are most frequent in the eastern half of the Tennessee valley. The timber has been largely cut along the railroad lines intersecting this point of the State, and of late years a number of small manufacturing establishments using the timber have been established. The largest body of hardwood in the Mississippi valley, if not the largest in this country, is found in the lowlands between the Yazoo and Mississippi rivers, the unbroken forest covering over 6,000 square miles, unsurpassed in the density of its growth and the great development of the trees. The forests of Arkansas on the Mississippi and in the valley of the St. Francis and White rivers, with a timber wealth similar in kind and development to that found on the opposite side of the Mississippi, extend over more than 2,000,000 acres.

Immense as the supply of hardwoods in the Southern States must appear, there can be little doubt that their depletion will be effected in a period of time scarcely exceeding in length that which witnessed the disappearance of similar resources once in the North. The timber lands south of the Ohio river comprise 211,375,000 acres, or 41 per cent. of the forest area of the United States. The number of saw mills in that territory has increased from 6,266 in 1880 to 13,380, and their product from $32,117,000 to $120,246,000. The number of planing mills has increased from 251 in 1880 to 1,526 in 1892, and their product from $3,405,023 to $9,026,000. The value of all other lumber products during the same period has increased from $11,326,000 to $30,222,000. The next quarter century is sure to witness an unprecedented activity in the increase of the industries dependent upon the products of Southern forests.

The spontaneous reproduction of the better qualities of hardwood timber is limited by obstacles which leave little promise for the future. To reproduce successfully the fostering care of man is required. This fact more generally understood cannot fail to rouse the intelligent land owner to energetic efforts in that direction. No other improvement can impart to his possession a more permanent value and insure a more profitable inheritance than the raising of timber on his waste or otherwise unproductive land, not to speak of the increase of comfort and content resulting from the sheltering cover of the forest in its beneficial influence upon the health and success of his crops.

Important West Virginia Improvement

The W. C. White Lumber Co., of Cumberland, Md., has recently made some extensive purchases of timber land and timbering business in Preston county, W. Va. The chief of these purchases is the business and interests of J. J. Storer at Rowlesburg, on the Baltimore & Ohio Railroad, in the southern part of the county. They have also bought several extensive tracts of heavily-timbered land along the Cheat river up toward the Pennsylvania line. These latter lands are as yet inaccessible except by the Cheat river, and its direction is wrong for the new owner's purposes. The company has surveyed a standard-gauge railroad route up the Cheat river valley to the first of these tracts, a distance of about seven miles from Rowlesburg, and will commence building soon. Since the work has been put under way there are many reports as to what the ultimate intention is. It is known that the survey connects with the survey made some years ago for a road known locally as the "Black Bottle," which had Morgantown, W. Va., for its terminus. It is also known that considerable land valuable for timber and coal when a railroad is built has been bought along the old "Black Bottle" survey, and that it is held by people who can and of necessity, probably, will invest what is necessary to make it accessible. The fact that the Fairmont, Morgantown & Pittsburg road will soon be completed, thus giving any new road to Morgantown an outlet of the best sort, adds much weight to reports of activity on the "Black Bottle" route. In any event, it is sure that the W. C. White Lumber Co. is making preparations for a very extensive line of operations in Preston county.

Southern Lumber Notes.

THE members of the Pitch Pine Timber Association met on the 16th inst. in Pensacola, Fla., in pursuance of the adjournment at Brewton, Ala. Mr. W. W. Smith, of the Peters Lumber Co., was elected chairman, and A. J. McGowan, Jr., of Brewton, secretary. On motion, a committee of five was appointed to prepare specifications for sawn timber. The members of the committte were S. J. Forsher, H. Bears, W. S. Benn, A. McGowan, Jr., and G. H. Simmons. The committee retired and afterwards reported a classification, which will be published later. Mr. Benn moved that each firm represented make a written estimate of the output of their mills for the first half of the year 1893, which was carried. At the second session on Saturday a resolution was unanimously carried to amalgamate with the Yellow Pine Export and Manufacturers' Association. A meeting of the joint session was held in the evening, and thirty-one mills were represented. Mr. George W. Robinson, of Buckatuma, Miss., presided, with Mr. L. Hilton Green, of Pensacola, as secretary. Classifications for the use of the association were adopted. A general discussion in regard to the timber trade took place, and it is thought that for the next few months the mills would be able to obtain all the orders necessary at considerably advanced prices. The classification of the various grades of yellow pine will be printed and distributed at an early date.

THE manufacturers of sawn pitch pine timber met at Brewton, Ala., on the 10th inst. for the purpose of taking steps to work in co-operation with the lumbermen who recently met in Mobile. The main topic of discussion was the price of timber, and it was decided to schedule it for the present at $10.50 per thousand feet, this price not to be changed until authorized by a future meeting of the dealers. The following resolution was adopted:

Resolved, That whereas the present price of sawn pitch pine timber is much below the point at which a fair value for standing timber can be realized; and whereas, in the judgment of the association the present low price is largely due to overproduction; therefore, be it

Resolved, That we, the members of the association, recommend that the output of sawn timber for the present season be reduced 25 per cent. from the output of last season, and that the proper officers of the association take such steps as may be necessary to carry the resolution into effect.

After discussing the resolution and kindred topics relating to the timber industry, the association adjourned to meet at Pen-

sacola, Fla., on the 16th inst. Among the members of the Timber Manufacturing Association present were the Peters Mill Co., Sowell, Foshee & Co., Cedar Creek Mill Co., the Blacksher Mill Lumber Co., Lorelau Bros., Pollard Mill Co., Harold Mill Co., Hunter, Bem & Co., Dixie Mill Co., R. A. Bonifay and Lindsay, Simmons & Bros.

THE Winston Lumber Co., of Florida, now ship 25,000 feet of lumber a day, which is all used by domestic markets. The South Florida Railroad Co. and the phosphate companies are the largest buyers.

THE Lathrop-Hatten Lumber Co., of Riverside, Ala., have been making extensive improvements in their plant. They have now a battery of five 60-inch steam boilers in operation to run the company's mills at Riverside. They have also received a 3-room dry-kiln apparatus from the Standard Dry-Kiln Co. at Louisville, Ky. With their present facilities they have now one of the best saw-mill plants in the State. In connection with this the company own and control 10,000 acres of long-leaf yellow pine at Greensport, on the Coosa river. They have just completed four miles of narrow-gauge logging railroad which is now in operation, and they are banking now about 40,000 feet of logs per day.

A TRACT of 860 acres of timber land in Preston county, W. Va., has been purchased by Alexander H. Tait, of Randall.

MESSRS. EVANS, COGAN & CO. have acquired the timber rights of the George's Creek Coal & Iron Co. in property near Lonaconing, Md., and have commenced developments. Their plant will turn out spokes, hubs, axe handles, etc., and will employ a large number of men. They have a timber tramroad now under construction.

MR. A. T. STEVELEY, of Newport, Ark., contemplates putting in machinery for the manufacture of veneers, both sawed and shaved, and is now in correspondence with manufacturers.

MR. H. W. RUSSELL'S new spoke and handle factory at Huntsville, Ala., is completed, and operations have commenced.

WM. M. CARNEY, of Williams Station, Ala., will increase his lumbering facilities by the construction of a standard-gauge logging road now building in the direction of Pensacola and touching some fine timber lands in Escambia county, Fla.

EXTENSIVE purchases in West Virginia timber lands still continue. A party of New York and Pennsylvania capitalists, through E. L. Buttrick, of West Virginia, have purchased 105,500 acres of walnut, oak and poplar lands in Clay and Nicholas counties. Developments will doubtless be inaugurated on a large scale.

THE Kentucky & Carolina Timber Co. has purchased a large lot of walnut timber in North Carolina. This company has just obtained charter, and is composed of T. H. Mason, H. H. Bullitt and A. A. Bullitt. The capital stock is $50,000.

COL. T. L. HACKNEY, who owns an extensive milling plant at Valda, has been running steadily during the year, and the cut for the year will be 12,000,000 feet of lumber.

MESSRS. WILSON & CHAPMAN, owners of a planing mill in Whitney, W. Va., will at once commence a general overhauling of their plant. New engines, boilers, woodworking machinery and other improvements will be added, and the mill fully equipped with all modern appliances.

THE Southern Lumber Co. has been organized at Mobile, Ala., with George W. Robinson as president and Geo. A. Robinson as secretary. A site has been purchased on Three-Mile creek, near the city, and a fine mill will be erected to cut ash only.

LUMBER MARKET REVIEWS.

New York.

OFFICE OF MANUFACTURERS' RECORD, No. 126 Liberty Street, NEW YORK, December 20.

We cannot say that trade is brisk, yet there is a fair amount of business being done. We do not think, however, the local trade is doing as much business as are the dealers throughout the New England States and suburban New York. From all these points we hear the most encouraging reports, not only as to the present, but as to the future, and the united opinion of every salesman we have yet talked with goes to show that, barring epidemics, the coming year will be one of the biggest ever seen by the lumber trade. It is earnestly hoped by all who have the interests of the country at heart that Congress will take such steps to govern emigration as will guard against any danger of the cholera, because on this depends not only our business welfare next year, but also the success of the Columbian Exposition, from which we expect great results.

The recent organization of yellow pine men in the South has had a cheering effect on this wood, and, while prices have not advanced, there is a feeling that there are better times ahead. Quotations remain unchanged, as follows:

Building orders, 12 in. and under	$19 50@	20 00
" " 14 in. and up	20 00@	21 00
Yard orders, random	17 00@	18 00
Ship stock, 40 ft. average	22 00@	23 00
Heart face siding, 1 and 1¼ in	18 00@	19 00
1-inch wide boards	22 00@	——
1¼ and 1½-inch wide boards	23 00@	——
Kiln-dried sap	15 00@	16 00
Rift-sawed flooring, rough cargo lot.	36 00@	38 00
" tongue and grooved, in carload lots	40 00@	——

In a previous communication we mentioned the fact that Mr. Seymour, representing the cypress manufacturers, was in town and would probably have an exhibit of cypress which would be called to the attention of the architects of this city and vicinity. We are happy to state that the arrangements are now about perfected, and in our next issue we shall be able to outline more fully the details of the scheme. This wood is establishing a firm footing in the markets of the East, and we look for a large and continually increasing trade from this on.

North Carolina pine is in good demand; stocks are freely sold, and it is safe to predict that no surplus will be discernible for some time to come.

There is no particular improvement in the hardwood market.

Inquiries for quartered oak are numerous, and it is probable that the output will be readily disposed of. Prices are as follows:

QUARTERED OAK.

1x6 inch and up	$49 00@	50 00
Thicker	50 00@	53 00
Common	35 00@	38 00

There is a good demand for inch and a-quarter and inch and a-half plain oak, but a light call for one inch. Dry stocks in the thicker, as above noted, are readily disposed of, and this market could take quite a quantity. We append quotations:

PLAIN OAK.

1x8 inch and up	$35 00@	36 00
1¼ and 1½ inch	36 00@	38 00
2 inch	37 00@	39 00
Export oak	32 00@	34 00

There will be a meeting of the poplar manufacturers in Cincinnati on January 10, and a large attendance of the manufacturers is earnestly desired. The prices of this wood have stiffened up considerably, but buyers are holding back and trying to purchase at the old rates, but this, we think, they will not be able to do. All the sellers have to do is to keep a stiff upper lip and hold their goods at the advanced prices.

There is a good call for elm, and we think the demand for this wood is likely to increase in the near future. We consider it good property. Current prices are about $25.00 per thousand for inch lumber in good, dry stock.

Other woods remain about the same as last noted:

ASH.

1 inch	$35 00@	37 00
¼, ½ and 2 inch	37 00@	40 00
2½, 3 and 4 inch	38 00@	41 00
Common	22 00@	24 00
Balusters	22 00@	26 00

Baltimore.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, December 22.

The local lumber and timber market may be written fairly active, with prices steady to firm for all desirable grades and dimensions. The volume of business has been good for this period of the season, and the occurrence of the holiday season is not likely to restrict trade to any great degree. The demand is constant and receipts are liberal, especially in North Carolina yellow pine, which is in good demand at list figures. Cypress is firm for the better grades and receipts less liberal, while low grades are not in as good request. White pine is in good demand and values steady. In hardwood generally the list of prices holds very steady in anticipation of a good trade at the opening of the new year. All the planing mills report a fair business, and factories are generally well supplied with orders and prices realized show an improvement. Box factories are all doing fairly well, with a good prospect for next season. The shingle market is firm, although the demand is not so liberal, while receipts are not so liberal. Laths are quiet and steady.

The following table represents the prices current at this date:

VIRGINIA AND NORTH CAROLINA PINE.

5-4x10 and 12 No. 2, kiln dried	$17 00@	17 25
4-4x10 and 12 No. 1, " "	19 75@	20 25
4-4 narrow edge, No. 1, kiln dried	17 25@	17 75
4-4 wide edge, " " "	22 50@	——
6-4x8, 10 and 12, " " "	22 25@	23 50
4-4 No. 1 edge flooring, air dried	15 50@	16 50
4-4 No. 2 edge flooring	12 50@	13 00
4-4 No. 1 12-inch stock	17 00@	17 50
4-4 No. 2 " "	13 50@	14 50
4-4 edge box or rough wide	8 50@	9 50
4-4 " " (ordin'y widths)	8 50@	9 00
4-4 " " (narrow)	8 00@	8 50
4-4x12 " "	10 50@	11 00
¼ narrow edge	7 00@	7 50
¼ all widths	7 50@	8 00
¼ 10x16 wide	8 00@	9 00
Small joists, 2½—12, 14 and 16 long	8 00@	9 00
Large joists, 3—16 long and up	9 50@	10 50
Scantling, 2x3—16	9 50@	10 50
" 2x4—16, 18 and 20	9 50@	10 50
" 3x4—16, 18 and 20	9 50@	10 50
" 6-4x12—16	10 50@	11 00
" 8-4x12—16	10 50@	11 00
" 6-4x10—16	9 00@	9 50
" 8-4x10—16	9 00@	9 50

SOUTHERN PINE.

Siding and edge boards	14 50@	15 50
Heart face boards	22 50@	23 50

WHITE PINE.

1st and 2d clear, 4-4	48 00@	52 00
" " 5-4, 6-4 and 8-4	48 50@	52 50
3d clear, 4-4, 5-4, 6-4 and 8-4	43 00@	44 00
Good edge culls	14 00@	15 00
Good stock	17 00@	18 00
White pine, No. 1, 4-foot headed pickets	13 50@	14 50
4-4 selected edge	39 00@	43 50
6x8-4 selected edge, box out	39 00@	45 00

CYPRESS.

4-4x6, 16 feet, clear	23 50@	24 50
4-4x6, 16 feet, fencing	13 50@	14 50
4-4 rough edge	10 50@	11 50
4-4 edge, Nos. 1 and 2	19 50@	21 00

HARDWOODS.

Walnut.

⅝, Nos. 1 and 2	75 00@	100 00
4-4, Nos. 1 and 2	90 00@	100 00
5-4, 6-4 and 8-4	95 00@	110 00
Nos. 2½, 3 and 4	125 00@	——
Newell stuff, clear of heart	125 00@	——
Culls	30 00@	35 00

Oak.

Cabinet, white and red, plain sawed and good 1 and 2, 8 in. and up, 12 to 16 feet long, 4-4	35 00@	40 00
5-4 to 8-4	35 00@	40 00
Quartered white, 1 and 2 quality, all figured, 6 in. and up wide, 4-4	50 00@	53 00
Culls	10 00@	15 00

Poplar.

Nos. 1 and 2, ⅝	22 00@	23 50
" " 4-4	24 00@	25 50
Nos. 5, 6 and 8-4	27 00@	30 00
In yellow pine cargoes, log run stock	12 50@	16 50
Culls	12 50@	14 50

SHINGLES.

Cypress, No. 1 hearts, sawed, 6x20.	7 50@	7 75
No. 1 saps, sawed, 6x20	6 00@	6 25
No. 1 hearts, shaved, 6x20	6 50@	7 00
No. 1 saps, shaved, 6x20	5 25@	5 50

LATHS.

White pine	2 70@	2 75
Spruce	2 35@	2 40
Cypress	2 15@	2 20

Norfolk.

[From our own Correspondent.]

NORFOLK, VA., December 20.

The lumber and timber market has ruled active and firmer during the past week, and the movement for the current month will be the largest of the year. In North Carolina and Virgina yellow pine the demand shows a great increase, and prices still hold firm for the most desirable grades and dimensions. There is considerable speculation as to the foreign demand for this wood, and all the shipments made, from which returns have been received, show that it is very popular in Europe. The domestic demand still continues, and there is great activity in both rail and water shipments. Advices from the milling section throughout the State are very favorable, and mills are all working up to their full capacity. In air-dried lumber the market is quiet, with a moderate demand, and prices for flooring grades are steady, while box lumber is dull. There is great activity in all the planing mills, and dressed stock is in good demand.

Kiln-dried North Carolina pine lumber f. o. b. at this port is quoted as follows:

5-4 rift No. 1	$27 50@	——
5-4 rift No. 2	16 00@	——
5-4x10 No. 1	20 00@	——
5-4x12 No. 1	20 50@	——
5-4x10 No. 2	15 00@	——
5-4x12 No. 2	16 00@	——
5-4 edge No. 1	17 50@	——
5-4 edge No. 2	13 50@	——
4-4 rift No. 1	25 00@	——
4-4 rift No. 2	15 00@	——
4-4x10 No. 1	18 50@	——
4-4x12 No. 1	19 50@	——
4-4x10 No. 2	15 00@	——
4-4x12 No. 2	15 00@	——
4-4 edge No. 3	9 50@	——
5-4 edge No. 3	10 50@	——
4-4x8, 10 and 12 culls or box	9 00@	10 50
4-4x5-4 edge, cull or box	8 50@	——

VIRGINIA PINE.

4-4 flooring boards (dry and clear)	13 00@	14 00
4-4 flooring boards (rough)	7 25@	7 50

SHINGLES.

No. 1 hearts, split, car lots	6 50@	7 00
No. 2 hearts, split, car lots	5 50@	6 00
No. 1 saps, split, car lots	4 50@	5 25
No. 2 saps, split, car lots	4 00@	4 75
No. 1 sawed hearts, car lots	6 50@	7 00
No. 2 sawed hearts, car lots	5 00@	5 50

WOOD.

Hard, per cord	2 75@	3 00
Pine, per cord	2 75@	3 00

STAVES.

Red oak hogshead, prime	38 00@	——
Red oak hogshead, culls	22 00@	——
White oak hogshead, prime	50 00@	——
White oak hogshead, culls	28 00@	30 00
White oak heading, prime	50 00@	——
White oak heading, culls	26 00@	——

Charleston.

[From our own Correspondent.]

CHARLESTON, S. C., December 20.

There is a fairly active movement in lumber circles and the markets during the week have been steady, with a fair demand, principally from Northern ports. Throughout the milling section of the State the lumber industry seems to be improving, and from the number of mills which are running steadily and the various improvements in progress, a better demand is expected. There is some business doing with the West Indies and also numerous inquiries from South American ports. The schooner M. B. Millen left this week with 330,000 feet of lumber for Kingston, Jamaica. The schooner May Williams took out 478,000 feet of ' mber, and the bark entine E. S. Powell 489,852 feet of lumber, both bound for New York. For Philadelphia the schooner Rillie S. Derby took 310,000 feet of lumber. Prices of lumber continne steady under a fair demand. The quotations for merchantable are $14.00 to $16.00 for city sawed, and $12.00 to $14.00 for railroad. Square and round timber is quoted at $9.00 to $13.00 for railroad, and $8.00 to $11.00 for raft. Dock timber $4.50 to $6.50; shipping $8.50 to $10.50. Shingles are firm at $5.00 to $7.00 per thousand. Freights are unchanged at $5.00 to New York and $4.75 to Philadelphia.

EXPORTS OF LUMBER FROM CHARLESTON FROM SEPTEMBER 1, 1891, TO DECEMBER 16, 1892.

Exported to	1892-'93. Feet.	1891-'92. Feet.
New York	10,878,907	9,935,268
Boston	259,260	.....
Philadelphia	1,424,292	2,320,000
Baltimore	840,000	534,000
Other United States ports	799,000	998,000
Total coastwise	14,111,459	13,807,268
Great Britain	.....	.....
Palermo	.....	.....
France	.....	.....
West Indies	608,096	888,300
South America	.....	.....
Nova Scotia	.....	.....
Other foreign ports	.....	578,174
Total foreign	608,096	1,466,474
Grand total	14,719,555	15,273,742

Savannah.

[From our own Correspondent.]

SAVANNAH, GA., December 21.

There has been a large volume of busi-

ness at this port during the week in coastwise business of the lumber trade, and the market is in a good shape for this period of the season. At all points throughout the milling section of the State business is reported active, and mills are generally well supplied with orders. There is a brisk demand from Northern ports and also from the West Indies, with some inquiry from South America. The shipments during the week were 441,000 feet of lumber and 100,600 shingles to New York, 1,761,669 feet of lumber to Baltimore, 296,650 feet of lumber to Wilmington, Del., 22,648 feet of lumber to Boston, and 20,952 feet dressed pine lumber, 88,930 feet undressed lumber and 45,650 shingles to Port Morant; total 2,631,849 feet of lumber and 146,250 shingles. The total shipments since September 1, 1892, are 38,496,264 feet of lumber, 75,000 staves, 1,566 cases of cedar, 389,620 crossties, 2,549,250 shingles, 3,062 cedar logs and 2,240 bundles of laths. The list of values holds very steady, and for all desirable grades prices are firm. Freights are unchanged, with a liberal offering of tonnage and a light demand. The rates from this and nearby Georgia ports are nominal at $4.25 to $5.00 for a range including Baltimore and Portland, Me. To the West Indies and Windward rates are nominal, to Buenos Ayres or Montevideo $12.50 and to Rio Janeiro $15.00. To the United Kingdom for orders rates are nominal at £4 5s. per standard and to Spanish and Mediterranean ports $12.00 per thousand.

Pensacola.

[From our own Correspondent.]

PENSACOLA, FLA., December 21.

The lumber and timber trade of the port has been very active during the week, and, in fact, the business of the month promises to be the largest of the year. There is a good demand for timber, which in hewn is rather scarce. The inquiry from South America and the West Indies is very active, and as a sample of the business of the week we may mention the following shipments: For Algoa Bay, 558,000 feet of lumber and timber; Buenos Ayres, 850,000 feet; Rio de Janeiro, 1,360,000 feet; Rotterdam, 675,000 feet; Genoa, 762,000 feet, and 806,000 feet for Philadelphia. Pitch pine freights are quiet, with a limited demand, unfavorable advices from Europe tending to depress the market. There is some activity in South American freights, and rates are easier, shippers' views being $12.00 to $12.50 to Montevideo or Buenos Ayres and $14.00 to $14.50 to Rio. For the north side Cuba some business is reported on the basis of $5.75 to $6.00.

Mobile.

[From our own Correspondent.]

MOBILE, ALA., December 20.

There is every indication of an increase in the volume of trade in lumber and timber at this port during the winter, and the present outlook is much more favorable than at the corresponding period of last year. In all departments of the lumber industry operations are being reduced to system, and among the several lumber and timber associations there is better c -operation and more stability in price-lists than formerly. The business of 1891-92 was greater than ever recorded in the history of the trade, and during the current year to date the exports, both foreign and coastwise, have attained still greater proportions. The exports of lumber during the week were 1,164,632 feet, and since September 1, 1892, 17,742,554 feet, against 16,010,274 feet for the corresponding period last year. The greatest gain has been made in timber, of which hewn shows a record of 1,896,755 cubic feet since September 1, 1892, against 324,176 last year. In sawn timber the shipments since September 1 were 386,482 cubic feet, against 190,393 cubic feet for the corresponding period in 1891-92. Under these conditions lumbermen are generally well satisfied with present prospects regarding this industry, whose possibilities in this section seem to have no limit. The demand from Mexico and the West Indies is more decided, and orders are coming in from these points more freely. In the shingle trade there is also a marked improvement, and the mills are all very busily engaged.

Chattanooga.

[From our own Correspondent.]

CHATTANOOGA, TENN., December 19.

Every indication points to a revival of trade in this section in the timber and lumber industry. The weather has been very favorable lately for loggers, and large quantities are now located, so that on the first rise we may expect large receipts. The demand is very fair, and comes from points beyond the State, orders having been received from Minnesota and other States in the Northwest. The Loomis-Hart Manufacturing Co., of Chattanooga, Tenn., report the lumber trade as very active, and, indeed, both here and at all adjacent lumber points there is the greatest activity present. The outlook is very promising for this city as a great distributing lumber point. Shipments of considerable volume are already spoken of, and if the proper rates can be obtained to St. Louis there will be quite a trade established in the near future. The Loomis-Hart Company will probably be the first to make Chattanooga a successful shipping point for lumber. It is said that this company is now negotiating with the Chattanooga Steamboat Co. to transport lumber to St. Louis. The Loomis-Hart Company have about 5,000,000 feet of lumber in their yards, and if they can make the proper terms with steamers they will ship by every trip of the boat.

Memphis.

[From our own Correspondent.]

MEMPHIS, TENN., December 20.

The season is about closing; the mills are shutting down or slackening for taking stock and figuring up the year's profits; the weather is bad and stormy; building operations are practically stopped, and things are getting in shape to open up the new year.

The year just passing, while it has not been one of large profits in the lumber lines, has by no means been a bad one, as there has been no large failures in the lumber business, and no serious embarrassments in any of its branches. General prosperity has prevailed.

The export trade has largely increased, and has become a fixed and profitable branch of the regular lumber trade. The home shipping business has been somewhat enlarged, although the territory was pretty well covered before. There have been numbers of new mills put into the Memphis territory and some new territory opened up. The completion of the great bridge across the Mississippi river and the consequent bringing in already of one new railroad, the Cotton Belt, has resulted in materially lowering the freight rates to Texas and extreme Southwestern points. Taking the situation as a whole, there is nothing in the review of the year, so far as our line of business is concerned, with which to find fault. There has not been so much lumber sold or used locally as in the two preceding years, but the quality and price has been better, so that the aggregate pecuniary result is fully as large.

The shipping trade has steadily and profitably increased both in quality, amount and in territory covered. In this territory there has been but few failures, though there was an unusual effort toward economy and looking after expenses such as we h e not had in previous years, and of which much good will result. In the immediate Memphis district there have been no failures. One concern, a small one, the Memphis Lumber & Manufacturing Co., has sold out to its president; otherwise there is no change in any of our local firms, except a general and steady improvement.

The stocks of lumber are all fully adequate to the demands, except that there is a little scarcity of dry oak and ash. Poplar is slowly but surely going off the market and its place largely taken by cottonwood. The Lumber Exchange is stronger than ever and steadily looking after the interests of its members and associates. At its last meeting it decided to employ an official inspector and to establish a set of shipping inspection and grade rules. They will probably be copied by the committee having the matter in hand from the Chicago Poplar Association and Southern Lumbermen's Association rules, a sort of combination that will fit our market both locally and for shipping uses.

A company has been formed here to put up a canning factory. Thomas G. Boggs, secretary of the Young Men's Business League, is a leader in the enterprise. Canning factories and creameries seem just now to be the proper thing to engage in. It is a small craze, but it will help the lumbermen while it lasts. The belting, mill supply and general machinery men, Lee Bros. and N. A. Gladding, for Atkins & Co., are all, as they report, fully busy. The associate trades, boxes, baskets, cooperage and general woodworking, are all fully supplied with orders.

The Stonewall (Miss.) Mills is a new lumber company with $200,000 capital. The Alabama Great Southern Railroad has just finished improvements on its shops at Meridian, Miss., to the amount of $200,000.

There are no changes in prices to note, and the promise is for quiet times until the next year.

BLACK WALNUT.	
1st and 2d, 1, 1½ and 2-inch	$65 00@ 70 00
Common	35 50@ 40 00
Counter tops	90 00@ 110 00
ASH.	
1st and 2d clear, 1 to 4-inch	24 00@ 30 00
Common	12 00@ 14 00
CYPRESS.	
1-inch, 1st and 2d clear	22 00@ 24 00
1¼, 1½ and 2-inch	24 00@ 26 00
Fencing 1x6, 16 feet	15 00@ 16 00
POPLAR.	
1-inch, 1st and 2d clear	24 00@ 25 00
1½ and 2 inch, 1st and 2d clear	26 00@ 28 00
Common boards	14 00@ 16 00
Dressed, 1, 1½ & 2-in., 1st & 2d clear.	28 00@ 30 00
Common dressed, 1-inch	16 00@ 17 50
Squares	22 50@ 26 00
COTTONWOOD.	
1 to 3-inch mill run, culls out	9 00@ 12 00
Squares	12 50@ 16 00
RED GUM.	
1st and 2d	16 00@ 20 00
Common and culls	8 00@ 10 00
OAK.	
1 to 4-inch, 1st and 2d	24 00@ 26 00
Common, 1 and 2-inch	13 00@ 15 00
Quarter oak, 1-inch, 1st and 2d	30 00@ 32 00
Quarter oak, 1¼-inch and up	34 00@ 36 00
White $1 higher.	
YELLOW PINE.	
1st and 2d, 1½ and 2-inch	18 00@ 20 00
Dressed	25 00@ 30 00
Flooring, 5 and 6 d and m	17 50@ —
Flooring, 3 and 4 d and m	17 50@ 20 00
2d flooring	15 00@ 17 50
Heart step lumber	27 50@ —
Ceiling, 1st and 2d, ¾, ⅝ and ½	17 50@ 20 00
Ceiling, 1st and 2d, ¾ and ⅞	16 00@ —
Common f. o. b. Memphis.	
Car lots	12 50@ —
TIMBER (LOGS).	
Poplar	6 00@ 10 00
Cypress	6 00@ 9 00
Cottonwood	3 00@ 4 00
Gum	3 00@ 4 50
Oak	6 00@ 12 00
Ash	8 00@ 13 00
Black walnut	15 00@ 50 00
SHINGLES.	
No. 1 heart cypress, 16-inch	3 00@ —
No. 1 sap, 16-inch	2 25@ —
LATH.	
Poplar	2 00@ 2 75
Cypress	—@ 2 50
Pine	—@ 2 00

Beaumont.

BEAUMONT, TEXAS, December 17.

As the year is about closing the usual business settlements will be in order, but from the present outlook the lumber trade will not lose any of its activity on that account. The situation here at present in all departments of this industry is very satisfactory, and in summing up the business of the year the record will show a very fair volume of business. During the week business has been fairly active, with a good demand from local State dealers and from other States. The Beaumont *Journal*, in its review of the lumber trade, says: "Business now is fairly active, and it seems now that the holidays will interpose but a brief check to the run in the lumber trade. Judging from the orders coming, in dealers are enjoying a steady trade, and have assurances of unusual briskness during the coming year. All the mills have large special orders enough to carry them well into the new year, and quite a number are offering." In the list of values there is a tendency to a higher range under the present brisk demand. Shingles are very firm in price, while the demand is not so excessive at the moment, which will work to the advantage of manufacturers, giving them a chance to increase their stocks to make prompt shipments when occasion requires. The usual meetings of our lumber companies will occur during January, when the customary reports will be given to the public and other matters relating to the lumber industry made known. At all milling sections in the district the reports received prove to be very encouraging, and mills generally are well supplied with orders. At Orange, Texas, all the mills are running on full time, except two, and in a few days they will start up. The mills at this place have been requested to bid for a large timber order from the Missouri, Kansas & Texas Railroad, which comes from the Kansas City office. One of the large mills at Orange booked an order this week for 500,000 feet of yellow pine to go by sail to Boston, Mass. Two large shipments are expected to be made to Brazil shortly, bids having been filed today. At Westlake and Lake Charles, La., everything in the lumber way is extremely active, and business reported better than for some time past.

Orange.

ORANGE, TEXAS, December 19.

A very active and spirited movement is present in this section among lumbermen, and the market is showing up fairly well under a good demand for certain grades of lumber and timber. The mills here are all running except two, and five saw mills and four planers are at work. The recent rise in the Sabine river brought down about 6,000,000 feet of logs, which, with the supply on hand, will keep the mills busy until another run can be made. The coastwise shipments continue to increase and the trade inland is improving, while prices are more remunerative than for some time past. The schooner La Cassador took in a cargo of shingles at Lutcher & Moore Co.'s mill and left for Galveston on the 10th inst. The shipments for December bid fair to be the largest of any month during the year, the supply of cars being very liberal and shipments made promptly. The repairs on A. Gilmer's mill are about completed, and he will soon be running again on full time. Bancroft & Sons will start their mill under increased facilities.

Coal and Coke Notes.

THE exports of coal from Norfolk, Va., from January 1, 1892, to December 15, 1892, inclusive, as cleared by William Lamb & Co., agents at Lambert's Point, are as follows: Foreign exports, 5,196 tons, and coastwise, 29,010 tons. Total for the week ending December 15, 1892, 33,206 tons, and total since January 1, 1892, 1,559,260 tons.

A MILE extension of the West Virginia, Pineville & Tennessee Railroad is to be constructed up Straigh creek, near Pineville, Ky., to accommodate the coal operations now being commenced there by the Central Appalachain Co.

A SERIOUS fire broke out on December 17 in mine No. 3 of the Old Cahaba Coal Co. at Blocton, Ala. These mines were recently consolidated with the Tennessee Coal & Iron Co., and are now operated by them. The fire is believed to have incendiary origin, and it will be some time before it can be extinguished. The mine was in full operation, producing 1,400 tons of coal a day.

IRON MARKETS.

Philadelphia.

[From our own Correspondent.]

PHILADELPHIA, December 21.

The iron market has been somewhat heavy during the week and consumers seemed to have little difficulty in securing material at a shade below the prices recently in force. The leading producers being fairly well supplied with orders for the present, have shown no disposition to force the market, and are satisfied to await the opening of the new year before actively competing for business. There is a large amount of work in sight for the structural and plate mills, and the foundries in this vicinity are actively employed, so that the prospects are favorable for a large demand for crude material during the early months of the year. Notwithstanding the heavy consumption of pig iron, which has up to the present time been sufficient to absorb the increasing output and in addition reduce stock piles at the furnaces, prices continue weak, with the possibility of competition keeping prices at a low level. Buying is of the usual hand-to-mouth character, which, taken in connection with the desire of all manufacturers to end the year with light stocks on hand, tends to make the aggregate of sales small. Purchases cannot be postponed indefinitely, however, and as deliveries are being taken freely, there is a chance that with the resumption of active buying holders may be able to maintain prices. The reported sales of good grades of iron during the past few days at a shade below quoted rates causes the market to be in a feverish state, and desirable orders could no doubt be booked at twenty-five cents a ton below the prices current at the beginning of the month. Quotations are as follows for deliveries in this vicinity, with the usual concessions of twenty-five cents to forty cents a ton at points in Central and Southern Pennsylvania and in Delaware and Maryland:

Standard Pa. No. 1 X	$15 00@	15 25
" " No. 2 X	14 00@	14 50
" Forge	13 00@	13 50
Southern coke No. 1 foundry	14 25@	14 75
" " No. 2 "	13 50@	14 00
" gray forge	13 00@	13 25

Pittsburg.

[From our own Correspondent.]

PITTSBURG, December 21.

The weakening process is still going on, and at the present rate it is hard to tell where it will end. The prospects that were held out only a few weeks ago have disappeared, and the outlook is now as unfavorable as it can well be. The general impression at present is that prices are going still lower within a short time, and of course under that view there is very little disposition to do any buying for the spring business. There are no actual conditions that would lead one to believe that a turn for the better will take place at all soon, and the opposite presumption is that the market is once more on the point of sliding to no one knows where. An improved demand is about all that is needed now to produce a change in rates, but the great trouble is that at this time of the year there is so little demand that by the time the offers of trade come the prices will be literally out of sight. On all the lines there is a weakening that is very depressing. The fall that at first affected only Bessemer has spread to include the others.

Bessemer has fallen to $13.75 and $13.90, and the standard of $12.50 for gray forge that has held good for so long has dropped to some terms made in private that the outside does not know, but which is a shade under that rate. In addition to that, the low rates of Bessemer that are quoted have also been cut, but it is said only on exceedingly large orders, larger in fact than have been made for a long time. The reports of stocks on hand will soon be out and will show to what extent consumption has kept pace with the output, but at the same time it must be kept in mind that the almost complete stoppage of operations this week will have the effect of piling up the stocks to a great extent. The market is represented by the appended table:

Gray forge	$12 50@	——
Mill iron	12 50@	12 75
Foundry No. 1	14 00@	14 10
" No. 2	13 00@	13 10
Bessemer	13 75@	13 90

Sales during the week include 3,000 tons of Bessemer at $13.75 and another of 10,000 tons at a private rate. It might be added, too, that all the prices that are being made could well be called "private."

Wheeling.

[From our own Correspondent.]

WHEELING, W. VA., December 21.

It must be confessed that there is not quite so strong a feeling of confidence in the pig iron market as marked it two or three weeks ago. Furnaces that complained of prices their agents were making on December 1 are now willing to book good big lots for late delivery at those rates. Of course this is a very hard time of year to get at the true conditions, for the reason that no transactions are being recorded and business is talked almost entirely in the past or future. A great deal of iron has been sold for delivery through the first three months of next year, but there is still as much or more to be contracted for. Buyers prefer to wait a few weeks longer and see how the new year starts off. This may be attributed to lack of confidence or to the natural perverseness of human nature. It is not likely, however, that the buyers who really want material and wait till after January 1 to buy it will profit by the operation. Today furnacemen are anxious to sell simply because no one will buy, but when things get back to their old level and people get their profits invested for the year, there is liable to be an animation that will materially change the order of things. This, of course, is all speculation, but no more than the buying of pig iron for delivery next year. There is, however, one thing tangible, and that is that reports of proposed increase in the production of pig after January 1 is having a great deal to do with the willingness of furnaces to sell at lower figures than two weeks ago. An encouraging feature of the market is the fact that Southern iron is maintaining the stiffness that was put into it some weeks ago, and the offers of concessions do not come from that section. Bessemer pig is following the soft steel market on the down grade, and that class of iron can be bought for less than $14.00, though that is the figure generally quoted. Although there have been offers of concessions, as was noted above, the quotations given to the trade generally do not vary from those given last week, and are as follows:

No. 1 Northern mill irons	$12 00@	12 75
No. 1 Southern mill irons	12 50@	12 88
No. 1 foundry	14 50@	14 75
No. 2 "	13 50@	13 75
No. 3 "	13 00@	13 25
Bessemer	13 75@	14 00

Cincinnati.

CINCINNATI, December 17.

The business of the week has been mainly in small lots. Some fairly good sized orders have been placed for foundry grades. Large buyers feel indisposed to take hold, unless at concessions, which the stronger furnace companies decline to yield. The Northern furnaces are contesting with spirit for supremacy in the markets where the Southern irons have been obtaining a footing, and the contest is an active one, though happily void of bitterness. The continued reduction of stocks of coke irons in hands of the furnaces, and the continued large consumption of pig irons, excites wonderment upon the part of those making intelligent observations that any weakness in prices should prevail anywhere. It is a fact that the supply of coke irons unsold to-day is not a fortnight's supply. Were it not that about the holidays brief "closing down" at many of the foundries and mills curtail consumption somewhat, it would be reasonable to suppose that a very marked scarcity would prevail before a month. Should production and consumption proceed in the next ninety days as they have the past three months, a famine in iron may be looked for.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry	$13 75@	14 00
" " No. 2 foundry and No. 1 soft	12 50@	12 75
Hanging Rock coke No. 1	15 50@	16 00
" " charcoal No. 1	18 50@	19 50
Tennessee charcoal No. 1	16 00@	16 50
Jackson county stone coal No. 1	16 00@	16 50
Southern coke, gray forge	11 50@	11 75
" " mottled	11 00@	11 25
Standard Alabama car wheel	18 00@	19 00
Tennessee car wheel	17 00@	17 50
Lake Superior car wheel	17 50@	18 00

ROGERS, BROWN & CO.

Chicago.

CHICAGO, December 17.

For this time of the year business is keeping up remarkably well. Although no very large business is being booked there is a very good run of medium and small-sized orders. As is the usual custom at this time, buyers in general are running down stocks in yard in order to take annual inventory. Foundrymen in this vicinity state that business is good and the outlook fair.

Coke furnaces both North and South are holding firm as to prices, and very few concessions are being made.

Lake Superior charcoals remain quiet, with prices unchanged.

We quote for cash f. o. b. Chicago:

Southern coke No. 2 foundry	$13 85@	14 00
" " No. 1 soft	13 35@	13 60
Lake Superior charcoal, Nos. 1 to 6	17 00@	17 50

ROGERS, BROWN & MERWIN.

St. Louis.

ST. LOUIS, December 17.

The general conditions of the market are unchanged. The present period of dullness is expected to last for two or three weeks longer. Quotations remain the same, although special prices have been made in several instances.

We quote for cash f. o. b. St. Louis:

Southern coke No. 1	$14 50@	14 75
" " No. 2	13 25@	13 50
" " No. 3	12 75@	13 00
" gray forge	12 25@	12 50
" charcoal No. 1	16 00@	16 50
Missouri " No. 1	14 50@	15 00
Ohio softeners	16 50@	17 00
Lake Superior car wheel	18 00@	18 25
Southern " "	18 50@	18 75
Frick's Connellsville foundry coke	——@	5 68

ROGERS, BROWN & MEACHAM.

Louisville.

LOUISVILLE, December 17.

That general quietness should exist at this season is accepted by both makers and consumers of iron as natural. Manufacturers are all busy, and are not apprehensive of the demand falling off after the first of the year. Furnaces are well sold up for the first three or four months of 1893, and the large producers are not disposed to push sales and be forced to accept lower than ruling prices when they know there will be a demand for their iron at the proper time. Notwithstanding the short car supply, the condition of stocks shows a large reduction for November, and until the policy of the incoming administration is somewhat more definitely decided, there will be no blowing in of additional furnaces. The indications, therefore, are for a gradual reduction of stocks for some time to come.

We quote for cash f. o. b. cars Louisville:

Southern coke No. 1 foundry	$13 25@	13 50
" " No. 2 "	12 00@	12 25
" " No. 3 "	11 50@	11 75
" " gray forge	11 25@	11 50
" charcoal No. 1 foundry	15 00@	16 00
" car wheel	17 50@	17 75

GEO. H. HULL & CO.

COTTON MARKET.

NEW ORLEANS, LA., December 19.

Editor Manufacturers' Record:

The estimates of Bradstreet and Mr. Henry Neill during the past week are the last of the official authorities whose figures have any influence upon the market, but judging by the course of prices since their publication, but little attention is paid by the foreign or domestic spinner to small crop estimates. The former indicates a crop of this year's growth of 6,200,000, because he says that he has included in his estimate of 6,460,000 the cotton left over from last year's crop. Mr. Neill repeats his maximum crop estimate of November of 6,500,000, and says also that he includes the cotton left over from the last crop, say 250,000 bales. Some three or four weeks ago a publication by Bradstreet severely criticised Mr. Neill for making an estimate of 6,500,000, and yet on Friday last he more than confirmed Mr. Neill. Considering how short the time, a radical change in the impressions of Bradstreet of their crop ideas is shown by this last estimate. Evidently a good deal of cotton has been bought in anticipation of better prices to realize on when Mr. Neill's figures should be announced, because there has not been buying power enough since to sustain the market, and many of those who did buy have been gradually covering, and the closing prices this afternoon are twenty-four points under highest of Friday last. The movement from this time on will be the only thing to govern the market abroad as well as on this side. Spinners no doubt take the most active interest, and are watching the comparative movements very closely. We shall lose this week, as compared with this week last year of the amount coming into sight, 10,000 bales; in other words, we expect 264,000 against 274,000 last year. The course of prices for the past few days has disappointed us, Liverpool being the chief cause of the decline on this side, as the apathy they have shown has been most marked, and without their support no permanent improvement can take place in America. They evidently are desirous of more decided evidences of 6,500,000 estimates before going into the market for further supplies, and therefore we must wait, apparently, until they are more convinced than they are at present. The port movement this week last year was 259,000 bales. We anticipate a movement this week of 180,000. All accounts from the interior indicate rapid exhaustion, and in accordance with these reports a very rapid falling off after the first of January is in order. The interior merchant and planter will have to rely on his own information as to what the crop promises to be, and not depend upon what the estimates of official authorities may tell him what it is likely to be, although it must be very gratifying for them to know that their own impressions of what is true in their respective sections is pretty much true of all the cotton-growing States. At the moment Hatch bill agitation is out of the way, as it is not likely to be much discussed until after the holidays, and therefore this element of a depressing character is removed temporarily anyhow.

ATWOOD VIOLETT & CO.

CLOSING PRICES OF FUTURES DECEMBER 21.

Months.	New Orleans.	New York.	Liverpool.
December	9.45	9.56	5 11-64
January	9.47	9.60	5 12-64
February	9.54	9.74	5 14-64
March	9.62	9.88	5 16-64
April	9.69	9.96	5 18-64
May	9.77	10.06	5 20-64
June	9.84	10.14	5 22-64
July	....	10.21	5 23-64
August	....	10.25	5 25-64
September	....	....	....
October	....	....	....
November	....	....	....
Tone of market.	Steady.	Barely steady.	Quiet and steady.

CLOSING PRICES OF SPOT COTTON DECEMBER 21.

Grade.	New Orleans.	New York.	Liverpool.
Middling	9 11-16	9⅝	5¼
Low middling	9 5-16	9 7-16	5
Good ordinary	8 13-16	8¾	4⅞
Tone of market.	Quiet.	Steady.	Steady.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

* Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

☞ In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Anniston—Cordage Factory.—A cordage factory will be established. Colonel Chaddock can give information.

Bibbville—Saw Mill.—Dean & King are erecting a saw mill.

Bibbville—Brick Works.—The Bibbville Fire Brick Co. is improving its plant.

Bridgeport—Machine Works.—The Triple Wire Nail Machine Co. and the Rodebaugh Manufacturing Co. have been consolidated, and will be known as the Triple Wire Nail Machine Co., and will enlarge its plant.

Guntersville—Basket Factory.—D. R. Sanders has built an addition to his basket factory.

Huntsville—Harness Factory.—Michaels & Loeser have established a harness and saddle factory.

Mobile—Saw Mill.—The Southern Lumber Co. has been organized to erect a saw mill near Mobile. Geo. A. Robinson is secretary.

ARKANSAS.

Jonesboro—Electric Plant and Ice Factory.—The Jonesboro Power Co. has been incorporated with G. W. Ducker, of Newport, president; J. C. Hawthorne, of Jonesboro, vice-president; N. F. Lamb, of Jonesboro, secretary, and S. A. Warner, Jr., of Jonesboro, treasurer, for the purpose of erecting an electric plant, ice mill and waterworks plant. The capital stock is $7,000.

Little Rock—Drugs, etc.—The Halliburton Drug Co. has been incorporated with W. H. Halliburton, president; T. Halliburton, vice-president, and L. M. Halliburton, secretary and treasurer, to conduct a wholesale and retail drug business. The capital stock is $10[illegible],000.

Maysville—Flour Mill.—The Meyer Milling Co. has erected a 50-barrel roller mill. Machinery was purchased from the Barnard & Leas Manufacturing Co., of Moline, Ill.

FLORIDA.

Fort Meade—Essence Factory.—Farnham & Wright have started a factory to manufacture syrups, essences, etc.

Jacksonville—Saw Mill.—Wm. Sketter is erecting a mill six miles east of Jacksonville, at Big Potsburgh creek, on Jacksonville & Atlantic Railroad.

Tampa—Electric-light Plant.—W. D. Wilson, of Tarpon Springs, is prospecting for a site to erect an electric-light plant.

GEORGIA.

Americus—Canning Factory.—Endeavors are being made to organize a stock company to establish a canning factory.

Columbus—Electric Plant.—F. W. Prescott & Co., of New York and Boston, contemplate erecting an electric-power plant at Columbus.

Savannah—Electric-power Plant.—The Electric Railroad Co. will put in new machinery.

Savannah—Safe Factory.—W. D. Thomas will establish a safe factory and warehouse.

Senoia—Crate Factory.—A crate factory will be erected.

Waycross—Medicine Factory.—The Life Preserver Medicine Co. has been organized to manufacture medicine. The company is composed of local capitalists. R. A. Daniel can give information.

KENTUCKY.

Ashland—Publishing and Printing Company.—The Signal Publishing & Printing Co. has been incorporated by E. Clifton, H. E. Smith and I. N. Pollock.

Columbia—Flour and Saw Mills.—The Columbia Mill Co. has been incorporated to operate flour, saw and planing mills. The capital stock is $10,000.

Covington—Gold and Silver Mining.—The Georgia Gold & Silver Extraction Co. has been incorporated by J. M. Patterson, T. B. McKaig, W. E. Hawley and others to promote the McArthur-Forest process of extracting metals and the mining of gold and silver. The capital stock is $1,000,000.

Covington—Land and Improvement Company. The Huntington Land & Improvement Co. has been incorporated by W. B. Wilson, J. C. Droege, E. J. Hickey, Jos. L. Glenn and others to buy and sell land, etc. The capital stock is $60,000.

Covington—Medicine Factory.—The Bayer's Bitters Manufacturing Co. has been incorporated by Chas. Bayer, R. R. Carrell and E. W. Cirt to manufacture a patent medicine. The capital stock is $26,000.

Covington—Stone Quarries.—The Buckeye Moulding Sand, Brick & Quarry Co. has been incorporated by A. Lepper, T. J. Wade and A. J. Davies to open stone quarries. The capital stock is $100,000.

Louisville—Shoe Dressing.—The Acorn Shoe Dressing Co. has been incorporated by H. J. Stephina and H. Lubbers to manufacture shoe dressing. The capital stock is $5,000.

Newport—Nickel-plating, etc.—The Queen Liquid & Filtering Slot Machine Co. has been incorporated by G. W. Mott, Chas. McDevitt, W. H. Allen, R. W. Huntington and J. H. Davis to manufacture slot machines, nickel-plating, etc. The capital stock is $50,000.

Winchester—Furniture Factory.—A Northern company is prospecting for a site to locate a furniture factory. The Commercial Club can inform.

Winchester—Lumber Mill.—The Conn & Hagan Co. has been incorporated by S. A. Conn, J. A. Conn, L. T. Hagan, W. K. Hagan and C. Hagan to manufacture lumber, etc. The capital stock is $50,000.

Winchester—Novelty Works.—The Winchester Novelty Works has been established to manufacture novelties, etc. J. A. Tanner can give information.

LOUISIANA.

New Orleans—Carriage Factory.—J. Thomas & Bro. intend to enlarge their carriage manufactory.

New Orleans—Ice Factory.—The Consumers' Ice Works Co. is remodeling and reconstructing its drainage system.

New Orleans—Lumber Mill.—The W. J. Athens Lumber Co. has been incorporated by W. J. Athens, L. W. Straider, F. F. Davis, W. Renaudin and Chas. J. Herr to conduct a general lumber manufacturing business. The capital stock is $50,000. Mr. Athens is president; Mr. Straider, vice-president, and Mr. Davis, general manager.

New Orleans—Tobacco Factory.—The Aarons-Mendelson Co. has been incorporated by A. Aarons, Chas. Mendelson, J. Hart, W. Renaudin and others to manufacture tobacco, cigars, etc. The capital stock is $50,000.

New Orleans—Cottonseed-oil Mill, etc.—The David Manufacturing Co., Limited, has been incorporated to refine cottonseed-oil, jellies, preserves, etc. The capital stock is $50,000.

New Orleans—Soap Works.—The Crescent Soap Works, Limited, has been incorporated to manufacture soap. The capital stock is $50,000.

New Orleans—Distilling Company.—The Louisiana Alcohol Co. has been incorporated with R. B. Scudder, president; H. R. Healey, vice-president; S. F. Heaslip, secretary and treasurer, to deal in and manufacture spirits, etc. The capital stock is $100,000.

MARYLAND.

Baltimore—Boiler Works.—The Zell Manufacturing Co.'s plant has been purchased by Rob. R. Zell & Co., who will enlarge the plant and resume operations.

Baltimore—Tin-can Factory.—The E. F. Kirwan Manufacturing Co. has been incorporated by E. F. Kirwan, Chas. R. Kirwan, Vernon Hall, C. R. Riggs and others to manufacture and sell tin-cans, etc. The capital stock is $200,000.

Baltimore—Electric Company.—The Southern Electric Co. will increase its capital stock from $50,000 to $100,000.

Chestertown—Creamery and Ice Factory.—The stock company reported last week as having formed to establish a creamery and ice factory will be known as the Chestertown Creamery & Ice Co. The organizers are R. G. Nicholson, H. W. Beck and others.

Cumberland—Water Works.—The city will put a new boiler in its water works.

Cumberland—Lumber Mills.—The White Lumber Co. has been incorporated to deal in and manufacture lumber, etc. The capital stock is $50,000. The incorporators are W. C. White and D. H. Reynolds, of Cumberland; C. E. Perkins, of Rowlesburg, W. Va.; Howard Carlton, of Baltimore, Md., and Wm. Hartley, of Bedford, Pa.

Haight—Woolen Mill.—N. W. Steele will at once rebuild his recently burned woolen mill.*

Hyattsville—Gas-light Plant.—Endeavors are being made to organize a company to establish a gas-light plant.

Hyattsville—Brick Works.—The Hyattsville Brick Co., recently reported as organized, has been incorporated by N. A. Dunning, H. C. Saffer, G. C. Fisher, J. H. Twiner and H. Smith.

Loreley—Electric Plant.—F. H. Corthell & Co., of Boston, Mass., will erect an electric supply plant in Lorely at a cost of $20,000.

MISSISSIPPI.

Greenwood—Cotton Factory.—The Greenwood Cotton Co. has been incorporated to operate a cotton factory and to deal in cotton on commission. The capital stock is $25,000.

Narkeeha—Rim and Hub Factory.—Davenport & Co. contemplate establishing a rim and hub factory.

NORTH CAROLINA.

Aberdeen—Lumber Mill.—Messrs. Adam & Co.'s mill, reported last week as being built, will be operated as the Aberdeen Lumber Co.

Durham—Steam Laundry.—The Durham Steam Laundry will be established with D. C. Mangum and A. A. Sears as proprietors.*

Elkin—Woolen Mills.—The Chatham Manufacturing Co. will erect new woolen mills.

Elizabeth City—Saw Mill.—Kramer Bros. & Co. will erect a saw mill.

Leaksville—Tobacco Factory.—B. H. & G. D. Dyer will rebuild their tobacco factory reported as burned.

Raleigh—Cotton Manufacturing.—The Raleigh Cotton Mills may possibly increase capital next month.

Salisbury—Mill.—C. Gresham has purchased the Star mill property, etc.

SOUTH CAROLINA.

Langley—Cotton Mills.—The Langley Cotton Mills will increase its capacity.

Spartanburg—Flour Mill.—A. S. Waters has erected a roller flour mill.

TENNESSEE.

Chattanooga—Basket Factory.—The Chattanooga Wooden Tray Co. will remodel and refit its works, and will operate as a basket, fruit and vegetable package company.

Chattanooga—Cotton Mill.—Endeavors are being made to organize a stock company to erect a cotton mill. W. W. Sylvester can give information.

Memphis—Cotton Compress.—J. N. Falls, A. S. Caldwell and others have incorporated the Southern Compress Co. to erect a cotton compress.

Newport—Chair Factory.—F. H. Ordway, of Boston, Mass., will erect a chair factory in Newport.

Paris—Electric-light Plant and Water Works.—The city may possibly erect an electric-light plant and water works. Address the mayor.*

Shelbyville—Machine Works.—E. H. Kahl will rebuild his machine works recently destroyed by fire.

TEXAS.

Beaumont—Ice, Light and Refrigerator Plant.—The Beaumont Ice, Light & Refrigerator Co. is adding to its plant by erecting new machinery.

Dallas—Cotton Mills.—The Manchester Cotton Mills has been incorporated with the following directors: B. Blankenship, W. C. Howard and A. F. Hardie, of Dallas; W. S. Slayden, of Waco, and T. King, of Boston. The capital stock is $100,000.

Houston—Cotton Compress.—Endeavors are being made to organize a stock company to erect another cotton compress.

Laredo—Water Works.—The Laredo Water Co. will erect a standpipe 150 feet high.

Laredo—Woolen Mill.—George Taylor, of Fort Worth, intends erecting a woolen mill at Laredo.

New Braunfels—Water Works.—The city has erected standpipe addition to its water works.

Orange—Steam Laundry.—Smith & Gibson will rebuild their steam laundry, reported in this issue as burned.

Orange—Machine Shop.—McFarland & Talbert have purchased the Orange Foundry & Repair Co.'s plant, and will operate same.

San Antonio—Flour Mill.—The Geddes Milling Co. has been incorporated by D. J. Geddes, J. Geddes and D. P. Alexander to operate a flour mill. The capital stock is $30,000.

Velasco—Brick Works.—Endeavors are being made to organize a stock company to manufacture vitrified brick paving blocks.

Waco—Water and Electric Company.—The Waco Water & Electric Co. has been incorporated by S. W. Slayden, W. Cameron, S. A. Hobson, of Waco; W. J. Hobson and F. J. Hobson, of St. Joseph, Mo. The capital stock is $50,000.

VIRGINIA.

Alexandria—Furniture Factory.—The Deis Manufacturing Co. will rebuild its furniture factory reported as burned.

Berkeley—Lumber Mill.—Frey Bros. will rebuild their lumber mill reported as burned.

Clifton Forge—Marble Quarry.—The Virginia Marble & Iron Co. has been organized with E. M. Nettleton, president; C. F. Moore, vice-president; G. K. Anderson, trersurer, and F. M. Jones, secretary, to develop marble deposits, etc.

Danville—Tobacco Factory.—G. Penn, Sons & Co. have erected an addition to their tobacco factory.

Fredericksburg—Tin-can Factory.—H. Clay Thomas, of Thomasville, N. C., will start a tin-can factory in Fredericksburg.*

Ivy Depot—Land Improvement Company.—The Ivy Alliance Industrial & Land Improvement Co., reported last week as incorporated, has the following officers: W. C. Wood, president; C. H. Anderson, treasurer; R. W. Mackreth, secretary.

Meadowville—Saw and Planing Mill.—Edward E. Barney will build saw and planing mill, dry-kilns, etc.*

Petersburg—Trunk Factory.—Plans have been prepared for the trunk factory reported recently as to be built by Simon Seward. The plant will cost $50,000.

Richmond—Publishing Company.—The Progressive Publishing Co. has been incorporated with T. W. Wood, president; P. B. Shield, vice-president; W. H. Rowland, secretary and treasurer, to conduct a general printing business, etc. The capital stock is $20,000.

Roanoke—Tobacco Factory.—The Fishburne Brothers Co. has been incorporated with T. T. Fishburne, president; R. H. Fishburne, vice-president; T. J. Phelps, secretary and treasurer, to manufacture and sell leaf tobacco. The capital stock is $100,000.

Staunton—Feed Mill.—Hugh F. Lyle, S. B. Lyle, W. E. and J. L. Hoy have purchased the Staunton steam feed mill, and will operate it as Lyle & Hoy.

WEST VIRGINIA.

Bluefield—Saw Mill.—A. J. Lacey & Son are rebuilding their recently burned saw mill.

Charleston—Planing Mill.—T. O. Meeker & Co. have put new machinery in their lumber plant and added a planing mill.

Clarksburg—Mercantile Company.—The Lowndes & Charpening Co. has been incorporated by R. T. Lowndes, G. B. Charpening, R. A. Charpening, R. M. Charpening and F. Steele to deal in general merchandise.

Fairmont—Factory.—The Fairmont Development Co. is negotiating with a Northampton (Mass.) company to establish a factory in Fairmont.

Iron Gate—Spike and Iron Works.—The Richmond Standard Spike & Iron Co. is putting in new machinery.

Marlinton—Lumber Mills.—The Rochester Boom & Lumber Co. has been incorporated to operate booms and to manufacture and deal in lumber. The capital stock is $1,000,000.

Point Pleasant—Folding-bed Factory.—The Hayes Folding Bed Co., of New York city, has purchased the Point Pleasant Manufacturing Co.'s factory, and will utilize it for the manufacture of folding beds.

Wheeling—Cement Works.—The Union Cement Co. has been incorporated by Edward Hazlett and others.

BURNED.

Alexandria, Va.—Deis Manufacturing Co.'s furniture factory; loss $110,000.

Berlin, Md.—The Seaside Canning Co.'s plant; loss $5,000.

Jacksboro, Texas.—Jacksboro Milling Co.'s mill; loss $40,000.

Leaksville, N. C.—B. H. & G. D. Dyer's tobacco factory.

New Iberia, La.—J. B. Lobdell's sugar-house.

Orange, Texas.—Smith & Gibson's steam laundry.

Shelbyville, Tenn.—New South Wagon Works.

Yorkville, S. C.—J. L. Parish's cotton gin.

THE Granger Foundry & Machine Co., of Providence, R. I., has furnished the calendering department of the Times Finishing Works, Philadelphia, and placed in the main drying department a 32-cylinder drier.

BUILDING NOTES.

Baltimore, Md.—Hotel.—Everett M. Brawner will erect a $200,000 hotel. Plans show a six-story composite structure of light-colored bricks and terra-cotta trimmings.

Charleston, S. C.—I. F. Wener will erect a $6,000 residence, for which D. G. Zeigler is preparing plans.

Cloverport, Ky.—Church.—R. W. Lewis & Bros. have received contract to erect a $5,000 church for the Presbyterians.

Dothen, Ala.—Church.—Bruce & Morgan, of Atlanta, have prepared plans for a Baptist church to be built at Dothen.

Huntington, W. Va.—Clubhouse.—The Barnum Club intends erecting a $35,000 building. C. E. Wyatt, recording secretary, can give information.

Kingston, Ga.—Freight Depot.—The Nashville, Chattanooga & St. Louis (office Nashville, Tenn.) will build a new freight depot for its Western & Atlantic branch.

Morganton, N. C.—Church.—The Lutherans will build a new church.

New Iberia, La.—Schoolhouse.—The New Iberia High School Building Association has been organized to erect a $10,000 public school building. R. S. Perry can give information.

Norfolk, Va.—Church.—The South Street Baptist Church has accepted the plans of Carpenter & Peebles for the new building it intends erecting. It will cost about $25,000.

Orlando, Fla.—Business Buildings.—Jas. L. Giles and H. F. Martyn have let contract to L. M. Boykin at $126,000 for the erection of a business block.

Owensboro, Ky.—Depot.—The Owensboro, Falls of Rough & Green River Railroad Co. will build a depot.

Roaring Gap, N. C.—Hotel.—The Roaring Gap Summer Resort Co. will erect a hotel.

Saluda, N. C.—Hotel.—D. G. Zeigler, of Charleston, S. C., is preparing plans for a $15,000 hotel to be built at Saluda for Miss E. S. Heriot.

San Antonio, Texas.—Schoolhouses.—The school board has accepted the bid of Messrs. Flary & Wagner at $11,681 for the erection of the Garden-street school, and at $11,840 for the Lopez-street school.

Sumter, S. C.—Hotels.—The Sumter Hotel Co. is to erect a $20,000 hotel, and D. G. Zeigler, of Charleston, is preparing plans for it.

Sumter, S. C.—Duker & Baltman will erect two store buildings to cost $15,000; E. D. Ricke, two store buildings to cost $12,000; B. J. Barrett, two store buildings to cost $15,000, and D. James Winn, a store building to cost $8,000. D. G. Zeigler, of Charleston, is preparing plans for the above.

Sumter, S. C.—Hotel.—D. G. Zeigler, of Charleston, is preparing plans for a $30,000 hotel which is to be built in Sumter.

Washington, D. C.—E. B. Smith has let contract to Nicholas Eckart for the erection of an $8,000 residence.

Washington, D. C.—W. C. Morrison will erect a $6,000 residence.

Washington, D. C.—W. J. Palmer has prepared plans for ten three-story houses which are to be built on Oregon avenue at a cost of $75,000.

RAILROAD CONSTRUCTION.

Alexandria, La.—Railroad.—The Louisiana, Arkansas & Missouri Railroad Co., of which Harlow M. Hoyt, of New York, is president, is likely to let contract in the early spring for the building of its road, as it is said that the necessary financial arrangements have been completed. The road is projected from Alexandria to Brinkley, Ark., a distance of 240 miles.

Alexandria, Va.—Railroad.—The Natchez, Alexandria & Texas Railroad Co., which was chartered recently to build a road from Natchez to Texas, has had preliminary surveys made from Alexandria to the Sabine river, a distance of seventy-three miles. The engineers are now completing the profiles and the locating survey will commence as soon as they (the profiles) are completed. The president of the company is Charles E. Roberts.

Arcadia, Fla.—Railroad.—The Florida Southern Railroad (office Palatka), now in the hands of Receiver Mason Young, is to be made a standard-gauge road from Arcadia down, and work on the improvement is to commence at once. The court has allowed Mr. Young $200,000 to expend in this matter. Track-laying on the extension below Punta Gorda to deep water is also about to commence.

Bragg's, Ala.—Railroad.—The extension from Bragg's Tank to Lewis, mentioned in our last issue, will not be built by the Louisville & Nashville Railroad Co., as stated, but by the Morris & DeBardeleben Lumber Co.

Bretz, W. Va.—Railroad.—A charter has been issued to the Dry Creek Railroad Co., organized for the purpose of constructing a railroad, to commence at or near Bretz, in Tucker county, W. Va., and run southwestward along Cheat river through the valleys of either Glade Fork or Dry Fork to the headwaters of Greenbrier river in Pocahontas county, and thence southerly through Pocahontas and Greenbrier counties to a point on the Chesapeake & Ohio Railroad at or near Caldwell in Greenbrier county, with branches and lateral roads up the Red creek and tributaries of Cheat river. The principal office will be at Bretz. The capital is $100,000, divided into shares of $100 each. The incorporators are Martin Lane, Wilmington, Del.; Levi Z. Condon, Baltimore; John L. Hummell, Philadelphia; James B. Rees, Rees' Tannery, W. Va., and R. F. Whitmer, Philadelphia.

Burnt Mills, Md.—Railroad.—Chas. G. Stone, of Brightwood, D. C., writes us as follows: "Having now obtained our charter, we have organized under the following name: the Washington, Burnt Mills & Sandy Spring Railway of Montgomery county, Md., with the following directors and officers: Directors—Wm. W. Rapley, Geo. W. Cissel, Frank B. Metzerott, Wm. A. McCullough, Albert Gleason, Francis Thomas, Robert H. Miller, Alban G. Thomas, J. Enos Ray, Asa M. Stabler. Officers—Charles G. Stone, president; Francis Thomas, vice-president; Geo. W. Cissel, treasurer; E. Everett Rapley, secretary; Albert Gleason, superintendent of construction; Guion Miller, legal adviser. Amount of capital stock $200,000; shares of stock $50 each. Books of the company are open for subscription to stock at the offices of Geo. W. Cissel, treasurer, Arlington Mills, Georgetown, D. C., and Francis Thomas, vice-president, Ednor, Montgomery county, Md. The engineer has been ordered to make survey and estimates of construction of said road and report the same to the board at once."

Chattanooga, Tenn.—Incline Railway.—The Lookout Mountain Railway Co. has been reorganized with T. B. Redmond as president, Linn White as vice-president and Clem S. Henry as secretary. Work upon the railway will recommence shortly.

Durham, N. C.—Railroad.—J. S. Carr will apply to the general assembly for a charter incorporating a company to construct a railroad from Durham to Charlotte by way of Durham, Chatham, Moore, Montgomery, Stanly and Mecklenburg counties.

Franklin, W. Va.—Railroad.—A charter has been issued to the Potomac & Appalachain Railroad Co. to build a line beginning at or near the Mineral county and State line at a point on the Molle branch of the Potomac river road opposite the city of Cumberland, Md., to the town of Franklin, Pendleton county; thence to the State line between Virginia and West Virginia, with a branch road from Petersburg to connect with the Baltimore & Ohio Railroad at Romney, Hampshire county, by the way of Moorefield, Hardy county. The principal office will be at Franklin, Pendleton county. The incorporators are George Chrisman and W. J. Cowger, of Rockingham county, Va.; H. W. Jones, of Highland county, Va.; William C. Kiser, of Franklin, Pendleton county, W. Va., and J. T. Kile, of Upper Tract, Pendleton county, W. Va. Each holds one share of $100 each.

Gate City, Va.—Railroad.—The directors of the Carolina, Greeneville & Northern Railway Co. held a meeting in Greeneville, Tenn., last week for the purpose of arranging for the early commencement of work on its railroad. The road is projected from a point on the South Atlantic & Ohio Railway near Gate City to Paint Rock, N. C., where it will connect with the Richmond & Danville Railway.

Hagerstown, Md.—Electrical Street Railway.—A franchise for an electrical street railroad has been granted to W. F. M. McCarty, of Hagerstown, and others, including William C. Seddon, W. H. Edmonds, R. H. Edmonds, A. H. Rutherfoord and Blackwell & Murdoch, all of Baltimore. If the franchise is accepted a 4-mile electric road will be built.

Huntington, W. Va.—Railroad.—The Chesapeake & Ohio Railroad Co. (office, Richmond, Va.) is reported as to double-track its road between Huntington and Ashland.

Huntsville, Ala.—Railroad.—The work of grading the 14-mile extension of the Nashville, Chattanooga & St. Louis Railroad (office, Nashville, Tenn.) from Huntsville to Hobbs Island is completed and track-laying has commenced.

La Fayette, Texas—Railroad.—Work has commenced on the construction of a railroad from La Fayette, Texas, to Cannon Switch, a distance of seven miles.

Macon, Ga.—Railroad.—Dunwoody Jones, C. L. Ashley, W. F. Maury and John A. Jones, of Atlanta, have applied for charter for the Southwestern, Sunbury & Seaboard Railroad for the purpose of building a line from Macon to Sunbury. Their capital stock is $50,000, with privilege of increasing to $2,000,000.

Maple Grove, Md.—Railroad.—A charter has been obtained for a railroad to extend to Manchester, and the following directors and officers have been elected: Jacob Frederick, president; William H. Shower, vice-president; Edward Oursler, treasurer, and C. J. H. Ganter, secretary; Henry J. Hoffacker, Charles T. Warner and Charles Zeigler.

Matagorda, Texas—Railroad.—Work will begin about January 1st on the construction of the Gulf, Newport & Northern Railroad, which is to extend from Alligator Head, on Matagorda bay, to Victoria, a distance of forty-six miles, and David Burns, of San Antonio, has been awarded contract. The road will ultimately be extended to San Antonio, probably in the near future.

Memphis, Tenn.—Railroad.—The Interoceanic Railway Co., mentioned last week, which projects a road to Arkansas, will hold a meeting at Little Rock on January 16 to make financial arrangements for beginning construction.

Natchez, Miss.—Electrical Street Railway.—The Natchez Street Railway Co. is endeavoring to secure authority from the city to construct necessary electrical equipment for operating its cars.

Okolona, Ark.—Railroad.—A survey has just been finished for six miles of an extension of the Southwest Arkansas & Indian Territory Railroad from Okolona, Clark county, to Antoine, Pike county. The grading and bridging are completed, and only about two miles of track is to be laid. This will make the road thirty-four miles long from Hebron to Antoine, Ark. The engineer is now locating a 12-mile extension from Antoine to the centre of Pike county, which will be built the coming year. J. H. Crawford, of Arkadelphia, is president.

Roberts, Texas—Railroad.—Chas. Moran, Cornelius B. Gold, of New York; Henry K. McHarg, of Stamford, Conn.; Jas. H. Oliphant, Osgood Welsh, Jos. A. Davidson, Wm. D. Barbour, Jno. M. Shedd, Amedee D. Moran and Rudolph Ross, Jr., all of New York and Brooklyn, have incorporated the Texas Midland Railroad Co. with a capital stock of $500,000. They have purchased and will operate the railroad from Garrett to Roberts, heretofore forming the Northwestern division of the Texas Central Railway Co. Arrangements for extending this line to Greenville will soon be under way. The business office of the company is to be at Terrell.

Ross, Texas-Railroad.—The Texas Central Railroad Co. has been incorporated by Chas. Moran, Cornelius B. Gold, of New York; Henry K. McHarg, of Stamford, Conn.; Jas. H. Oliphant, Osgood Welsh, Jos. A. Davidson, Wm. D. Barbour, Jno. M. Shedd, Amedee D. Moran and Rudolph Ross, Jr., all of New York and Brooklyn. The capital stock is $4,000,000; office at Ross. This road was recently purchased by the first mortgage bondholders. Arrangements for extending it to Waco will soon be under way. This road was formerly the main line of the Texas Central Railway Co.

Tallahassee, Fla.—Railroad.—Contract is let for building the Carrabelle, Tallahassee & Georgia Railroad, and work of construction will be commenced on January 3, 1893.

Uvalde, Texas—Railroad.—A report from San Antonio says that a railroad will be built from Uvalde to the Frio river, in Edwards county, a distance of forty miles.

MACHINERY WANTED

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Belting.—The Aberdeen Lumber Co., Aberdeen, N. C., will buy belting.

Bending Machine.—S. R. Gay, Anniston, Ala., will purchase a rim-bending machine.

Boiler.—A. A. Sears and D. C. Mangum, Durham, N. C., want a twenty horse-power boiler.

Boiler and Engine.—C. F. Ohlemacher, Scottsville, Ky., wants portable or semi-portable boiler and engine of eighteen horse-power.

Brick Machinery.—Fleming & Matthews, Callahan, Fla., want quotations on a hand press.

Cars.—F. M. White, Pearl River, La., wants pole-road cars.

Cotton-mill Machinery.—The Spring Creek Manufacturing Co., McKenzie, Tenn., wants a shearer and folder for brown sheetings, also stamp.

Dry-kilns.—Edward E. Barney, Meadowville, Va., wants prices on dry-kilns.

Electric-light Plant.—The mayor and Alderman Young, of Paris, Tenn., have been appointed a committee to correspond with electric companies to ascertain costs of plant.

Electric-power Station.—Sealed proposals for the construction of an hydraulic and electric-power station to be built for the city of Austin, Texas, will be received until January 4, 1893, at the office of the board of public works in the city of Austin, Texas. Proposals will be addressed to the mayor and president of the board of public works of the city of Austin, Texas, John McDonald.

Engine.—D. C. Mangum and A. A. Sears, Durham, N. C., want a ten horse-power engine.

Excelsior Machinery.—P. L. Wise, Pineville, Ky., would like to know the address of excelsior machine manufacturers.

Exhaust Fan.—The Aberdeen Lumber Co., Aberdeen, N. C., will buy an exhaust fan.

Gear-cutters.—The Alamo Iron Works, San Antonio, Texas, wants particulars on gear-cutters.

Knitting-mill Machinery.—A. H. & W. E. Cobb, Suffolk Knitting Mills, Suffolk, Va., want good Bronsen knitters, second-hand, seventy-six and eighty-four needles; also rib frames and winders.

Lathe.—The H. Mueller Manufacturing Co., Decatur, Ill., is in the market for double-head automatic lathe and cock grinder.

Laundry.—D. C. Mangum and A. A. Sears, Durham, N. C., want outfit for steam laundry.

Locomotive.—F. M. White, Pearl River, La., wants second-hand pole-road engine and cars.

Locomotive.—The H. Dudley Coleman Machinery Co., New Orleans, La., is in the market for a locomotive, either new or second-hand, for logging purposes, to run on iron rail weighing thirty to forty pounds per yard.

Pickle Machinery.—J. T. Dudley & Co., Bennettsville, S. C., wants prices on pickling machinery.

Planing-mill Machinery.—Edward E. Barney, Meadowville, Va., wants prices on planing-mill machinery.

Pump.—The Aberdeen Lumber Co., Aberdeen, N. C., will buy a steam fire pump of a capacity of from 100 to 150 gallons per minute.

Saw Mills.—N. J. Clodfelter, Crawfordsville, Ind., wants four second-hand mills to be used in Missouri.

Saw-mill Machinery.—Edward E. Barney, Meadowville, Va., wants prices on saw-mill machinery.

Steam Hammer.—The Alamo Iron Works, San Antonio, Texas, wants a steam hammer, 7 or 8-inch by 18 or 20-inch cylinder.

Tin-can Machinery.—H. Clay Thomas, Thomasville, N. C., wants to correspond with manufacturers of tin-can machinery.

Vinegar Machinery.—J. T. Dudley & Co., Bennettsville, S. C., want to get information on the manufacture of vinegar and want to buy machinery for its manufacture.

Washer Machine.—The Alamo Iron Works, San Antonio, Texas, wants a washer machine for 1-inch bolt and under to cut No. 10 plate and lighter. Second-hand machine would answer.

Water Works.—The mayor and Alderman Young, of Paris, Tenn., have been appointed a committee to correspond with water works companies to ascertain costs of plants.

Woodworking Machinery.—Claude L. Waller, 49 Rush street, Chicago, Ill., wants to correspond with manufacturers in regard to the manufacture of a new invention.

Woodworking Machinery.—The Deis Manufacturing Co., Alexandria, Va., may possibly buy $20,000 worth of machinery.

Woolen-mill Machinery.—N. W. Sheele, Haight, Md., will want woolen-mill machinery.

Braswell & Sherrod, of Rocky Mount, N. C., wants prices and samples of tobacco bags.

James E. Hedge, of Sheffield, Ala., wants to correspond with jail manufacturing companies.

The Morristown Tobacco Manufacturing Co., of Morristown, Tenn., desires to correspond with manufacturers of mechanical telephones.

SOUTHERN FINANCIAL NEWS.

New Banks.

Atlanta, Ga.—A bill amending the charter of the State Savings Bank and changing its name to the Fulton Savings Bank has passed the legislature.

Brunswick, Md.—G. F. Eamich is president; H. G. Horner, vice-president, and William Schnauffer, treasurer, of the Savings Bank of Brunswick, reported last week as chartered. The directors are: Hon. O. Horsey, A. G. Horine, M. D., J. T. Martin, L. Bretz, J. W. Hilleary, M. D., Z. T. Brantner, G. M. Swank, William Schnauffer, G. F. Eamich.

Crisfield, Md.—A national bank, to have a savings institution in connection, has been organized. Clarence Hodson is president; John P. Towes and L. E. Dennis, vice-presidents, and John Sterling, cashier; capital stock $25,000.

Davis, W. Va.—The First National Bank of Davis, mentioned in our last issue, has been fully organized with Col. Thomas B. Davis as president; Fairfax S. Landstreet, vice-president; C. E. Smith, of the Davis National Bank of Piedmont, W. Va., cashier, and Hons. H. G. Davis and S. B. Elkins and Messrs. Thompson, Lockwood, Henning, Davis, Elkins, Landstreet and

Col. T. B. Davis, directors. The bank will commence business shortly after the first of the year.

Erlanger, Ky.—The Erlanger Deposit Bank was opened for business on the 28th ult. Its capital is $50,000, of which $25,000 is paid in. W. H. Baker is president; F. A. Utz, vice-president, and J. C. Henry, cashier.

Erwin, Tenn.—A bank with a capital stock of $50,000 will commence business next April. J. F. Toney can probably inform.

Fayetteville, Ark.—The McIlroy Banking Co. has been organized with W. R. McIlroy as president; W. H. Whitlow, vice-president, and J. L. Dickson, cashier and treasurer. H. K. Wade was elected secretary of the directors. Messrs. J. K. Pool, Thomas Shore, G. A. and L. E. Barron are stockholders in addition to the above-named.

Natchitoches, La.—The Exchange Bank of Natchitoches commenced business on October 1, 1892. J. W. Cockerham is president, and John M. Tucker, vice-president.

Pensacola, Fla.—The organization of the Citizens' National Bank, recently mentioned, ha been completed by the election of L. Hilton Green as president, and William Fisher as vice-president. The capital stock is $100,000, and it has all been subscribed.

Portsmouth, Va.—John M. Hume has been elected president of the People's Bank, mentioned last week as organized.

Sheffield, Ala.—Philadelphia (Pa.) capitalists contemplate establishing a bank in Sheffield.

Sistersville, W. Va.—The Tyler County Bank, recently reported as chartered, has formally organized by the election of Edwin A. Durham, president; Alvin C. Jackson, cashier, and Robert McCormick, Ephraim Wells, Joseph T. Jones, Edwin A. Durham and Alvin C. Jackson, directors. The bank will have a capital of $50,000 and will do a general banking business.

Terrell, Texas.—The First National Bank has increased its capital stock by $25,000.

Umatilla, Fla.—The firm of John Clark & Co. has been organized to conduct a banking business.

Washington, N. C.—A bank is to be started next month with a capital stock of $50,000. Organization has been perfected with Seth Bridgman as president, and Thomas J. Latham, of Norfolk, Va., as cashier; also the following directors: Seth Bridgman, W. P. Baugham, E. M. Short, John Havens, Jr., N. S. Fulford, Sr., Dr. W. A. Blount, all of Washington, N. C., and Lewis Latham, of Pantego, N. C., with two more to be supplied.

Water Valley, Miss.—The Mechanics' Savings Bank, capital stock $15,000, has lately been established.

Wharton, Texas.—R. B. Houston, A. H. Dawdy, J. T. Bolton and George L. Rust are projecting the establishment of a national bank to have a capital of $50,000.

Atlanta, Ga.—A bill has passed the legislature to authorize the city of Atlanta to issue $250,000 of bonds. For further particulars address the mayor.

Atlanta, Ga.—The semi-annual interest of 3½ per cent. on the first mortgage bonds of the Atlanta & Charlotte Air Line Railway Co., due January 1, will be paid on and after January 3 at the office of the Central Trust Co. of New York.

Baltimore, Md.—The City Passenger Railway Co. has declared a dividend of seventy-five cents a share for the past quarter.

Baltimore, Md.—The Northern Central Railway Co. has declared a dividend of 5 per cent.

Baltimore, Md.—The Surety Guarantee Building & Loan Co. has been incorporated by John C. Hicks, George Hausch, Jr., J. Z. Wilson, C. E. Burkhardt and Henry J. Hick with a capital stock of $10,000.

Baltimore, Md.—The Alabama Home Building and Loan Association will pay its semi-annual dividend of 4 per cent. on special stock and 3 per cent. on paid-up stock on January 1 at the Manufacturers' National Bank.

Bridgeport, Ala.—The Bridgeport Investment Co. has declared a dividend of 4 per cent.

Covington, Ky.—E. F. Abbott, R. R. Rich and G. M. Abbott have incorporated the Ætna Real Estate & Building Co. with a capital stock of $30,000.

Dallas, Texas.—J. M. Strong, E. E. Gibson and J. R. Elewett have incorporated the Dallas Guarantee Co. with a capital stock of $50,000.

El Paso, Texas.—The new election for the issuance of $205,000 of bonds, mentioned last week, will be held on January 10, 1893. For information address the mayor.

Houston, Texas.—George W. Beale, G. B. Hengen, A. J. Wheeler, N. L. Mills and others have incorporated the Houston Heights Building and Loan Association with a capital stock of $100,000.

Little Rock, Ark.—The Interoceanic Railway Co. is to hold a stockholders' meeting on January 16 to consider issuing bonds to construct its railroad to the amount of $20,000 per mile and mortgaging its property to secure said bonds. S. G. Eddy is secretary.

Maysville, Ky.—The Mason County Building and Saving Association has declared a dividend of twenty-five cents a share.

Newnan, Ga.—A bill authorizing Newnan to issue or sell bonds has passed the legislature. The mayor can be addressed for information.

New Orleans, La.—Henry Mayer, Thomas Sully, Hunter C. Leake, George Thomson and others have incorporated the Southern Industrial Life Insurance Co. with a capital stock of $100,000.

New Orleans, La.—The Times-Democrat Publishing Co. has declared a dividend of 8 per cent.

Norfolk, Va.—The Norfolk & Southern Railroad Co. (office, 74 Broadway, New York) has declared a dividend of 1 per cent., payable January 10.

Paducah, Ky.—McCracken county has refunded its debt of $500,000 at 5 per cent. The old bonds were paying 6 per cent.

Richmond, Va.—The Newport News, Hampton & Old Point Development Co. has declared a dividend of 7½ per cent.

Richmond, Va.—The Petersburg Railroad Co. and the Richmond & Petersburg Railroad Co. have each declared a dividend of 3 per cent., and the Richmond, Fredericksburg & Potomac Railroad Co. a dividend of 3½ per cent. The two first are payable on January 3 and the latter on January 2, 1893.

San Antonio, Texas.—The stockholders of the San Antonio & Aransas Pass Railway had a called meeting on December 15, and the consolidated 4 per cent. bonds of the $17,100,000 were authorized. This will cover all the indebtedness of the company in former bonds. The proposition to increase the capital stock was rejected. A large majority—$4,100,000—of the stock was represented. After this meeting the directors of the road had a meeting and confirmed the action of the stockholders. At the directors' meeting President Robinson's much-talked-of resignation was not presented, neither was the reported sale of a majority of the stock of the company to Mr. Huntington, of the Southern Pacific Railway Co.

West Point, Ga.—A bill has passed the legislature authorizing West Point to issue bonds. The mayor can give information.

Chesapeake & Ohio Steamship Co., Limited.

Advices from London state that all the papers for the organization of the Chesapeake & Ohio Steamship Co., Limited, have been signed and the capital has all been subscribed. The line is in the interest of the Chesapeake & Ohio Railway Co., which owns a majority of the stock. Contracts have been awarded to builders on the Clyde for the construction of six steamers. Three of them are about the size of the new White Star steamer Cufic, the other three are about one-fifth smaller. The steamers will make regular weekly sailings from Newport News to England, and additional steamers will be built (probably in America) as the line requires them.

Mr. Ingalls, president of the Chesapeake & Ohio Railway, says that the advantages to the railway company of this line can hardly be overestimated. The export business from Newport News is even now more than enough for these steamers, as well as all the tramp steamers that can be secured. Last year over 120 steamers were loaded by the Chesapeake & Ohio from that port for Europe.—New York *World*. †

Important Changes in Schedules of Western Passenger Trains via Pennsylvania Railroad.

On and after Sunday, December 18, important changes will be made in through trains via Pennsylvania Railroad, leaving Baltimore as follows:

Columbian Express at 11.10 A. M. daily, arrive Pittsburg 9 P. M., Chicago 10 A. M., Cincinnati 6.35 A. M., and Indianapolis 7.35 A. M., with sleeping and dining cars through to those points. At Harrisburg connection will be made with Fast Line for all points in Central and Western Pennsylvania, Cleveland and Toledo.

Pennsylvania Limited at 2.15 P. M. daily, arrives at Chicago 12 noon. Sleeping car to Cincinnati discontinued on this train.

St. Louis & Cincinnati Express at 2.15 P. M. daily, with through sleeping and dining cars, arriving in St. Louis 5.30 P. M., and Cincinnati at 8.15 A. M.

Western Express and Southwestern Express at 8.45 P. M. daily. No change in through connections and sleeping and dining cars. A Pullman sleeping car will be placed in service on Western Express through to Buffalo via Canandaigua and New York Central.

Pacific Express will leave 11.40 P. M.

Several changes will be made in local trains on the various divisions; full information and time-tables can be obtained on application at ticket offices. †

OPPORTUNITIES FOR INVESTMENT

We shall be pleased to answer communications and give information concerning the following opportunities for investment. Address all correspondence to the MANUFACTURERS' RECORD, Baltimore, Md., and be particular to give the number of the advertisement to which you refer.

No. 6—PHOSPHATE LAND near Eureka, Fla., in the phosphate belt. It is heavily timbered with long-leaf pine; also a small tract near Fort Meade, Fla. Several small tracts in Marion, Orange, Lake, Polk, Pasco and Putnam counties, Fla., suitable for orange and vegetable growing.

No. 7.—A MANUFACTURING COMPANY in Texas desires to place $28,000 ten-year 8 per cent. mortgage bonds, the total issue being $60,000, of which $32,000 has already been sold. The proceeds are to be used for final payments on machinery and for working capital. The bonds are secured by the entire property of the company, consisting of factory building, machinery and real estate, all of which has a clear title and is free of any incumbrance.

No. 8—PHOSPHATE LAND.—600 acres pebble phosphate land within one and one-half miles of two important and competitive railroads. Extensive deposits in sand and marl matrix from two to fifteen feet deep, and ranging from 30 to 80 per cent. pebble. Analyses show from 60 to 80 per cent. phosphate of lime.

No. 9.—A tract of land located in the suburbs of Macon, Ga., and admirably adapted to manufacturing purposes, is offered for sale at reasonable price. The property is at the junction of three railroad lines, has abundant water supply, labor can be obtained cheaply, and all conditions requisite for industrial enterprises are present.

No. 10.—About 10,000 acres of mineral and timber land in one tract in North Carolina can be purchased cheap. The minerals are copper, iron, silver and nickel.

No. 11.—A tract of about 10,000 acres of timber land near Bristol, Tenn. Contains also several large deposits of iron ore which will soon be accessible by railroads now under construction.

No. 12.—About 17,000 acres of coal and timber land in Scott and Wise counties, Virginia, near to both the Norfolk & Western and South Atlantic & Ohio Railroads.

No. 13.—A copper ore property is for sale in North Carolina. There is an extensive deposit of ore upon which some development has been done with results that indicate the existence of a valuable property.

No. 14.—A woodworking concern in Virginia, engaged in the manufacture of interior woodwork, with a well-established trade and an abundance of orders in hand, desires to secure $10,000 of additional capital to increase the plant and enable more advantageous purchases of material. It is desired that the investor of additional capital in this company shall assume its financial management. The business is well organized, has good plant, and is making money. The addition of more capital will greatly increase its facilities and earning power.

No. 15.—A fine tract of timber property in North Carolina, aggregating about 1,200 acres and covered with hardwoods and pine, can be secured at a reasonable figure. About one-quarter of the property is cleared and is admirable farming land. There are buildings upon the tract which could be utilized to good advantage for manufacturing purposes. There is a railroad station within one mile of this tract.

No. 16.—A valuable coal property in Tennessee, which is well under development, shipping coal regularly and earning a handsome return upon its value, can be purchased at a low figure. The property is sure to earn, under proper management, 10 to 15 per cent. per annum on the price that is asked for it. The property has been in operation about two years, and the mines are well established, and the shipping facilities are excellent.

No. 17.—We have knowledge of a large and very valuable granite property in Virginia, which is available for development and which ought to prove a very good investment. The property lies two and one half miles from the Norfolk & Western Railroad, and very favorable arrangements can be made for the construction of a side track to the quarry. The property has never been developed, but could be opened at once at small expense. The granite is of excellent quality, admirably suited for building purposes. The color ranges from pale pink to purple, and the stone is susceptible of a high polish. There are quarries not far distant upon the same vein which are furnishing stone that has a wide reputation.

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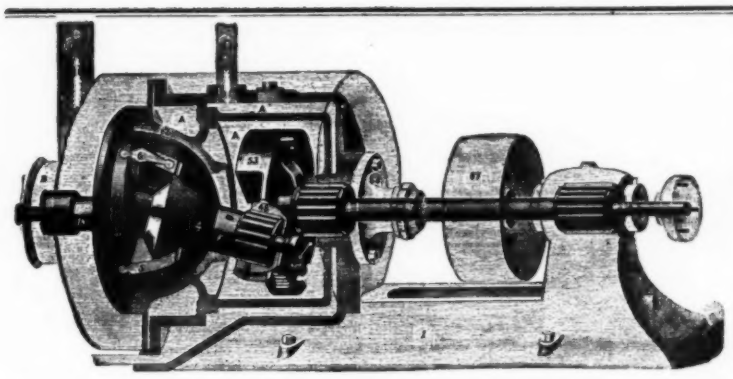

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WANTED—FOREMAN for Architectural and Ornamental Iron Works. Must have experience, recommendations, experience in handling men, be systematic and accurate. State salary and address P. O. BOX No. 182, Roanoke, Va. j6

WANTED—Common and Press Bricklayers. Only good workmen need apply. Address VALENTINO, BROWN & CO., Wilmington, N. C. D23

WANTED—TO LOCATE AND SECURE EMPLOYMENT FOR ALL HONEST AND INDUSTRIOUS PEOPLE WHO WANT TO COME SOUTH. WRITE FOR PARTICULARS. McCLURE & MAXWELL, REAL ESTATE & MINERAL LANDS, KNOXVILLE, TENNESSEE.

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WANTED—Position in Ice Manufactory as Engineer or office position Address "B. A. F.," P. O. Box 563, Asheville, N. C. J13

WANTED—Situation as Electrician or Electrical Draughtsman, by a man well up in car motor work and all branches of electricity. Can furnish best references Address "S E. A.," care MANUFACTURERS' RECORD. J13

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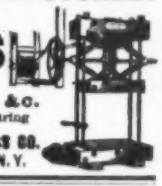

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UNITED STATES ENGINEER OFFICE, NEWPORT, R. I., November 26, 1892. SEALED PROPOSALS, in triplicate, for dredging in Newport Harbor, R. I., will be received at this office until 12 M., noon, on the 10th day of January, 1893, and then opened. The attention of bidders is invited to the Acts of Congress approved February 26th, 1885, and February 23d, 1887, Vol. 23, page 332, and Vol. 24, page 414, Statutes at Large, and the Act of August 1, 1892, Sections 1 and 2 (Public No. 193). The United States reserves the right to reject any or all proposals and to waive any informalities. Full information furnished on application. W. H. BIXBY, Captain Corps of Engineers, U. S. Army.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., December 6, 1892. SEALED PROPOSALS will be received at this office until 2 o'clock P. M., on the 5th day of January, 1893, and opened immediately thereafter, for all the labor and materials required for the low-pressure, return-circulation, steam-heating and ventilating apparatus, &c., for the U. S. Courthouse, Postoffice, &c., building at Helena, Arkansas, in accordance with the drawings and specifications, copies of which may be had on application at this office or the office of the Superintendent at Helena, Arkansas. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any or all bids or to waive any defect or informality in any bid, if it be deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked "Proposal for the Low Pressure, Return Circulation, Steam-Heating and Ventilating Apparatus for the U. S. Courthouse, Postoffice &c., at Helena, Arkansas," and addressed to W. J. EDBROOKE, Supervising Architect.

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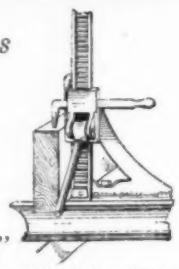

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Yellow Pine.

I. B. Gordon & Co., Alpine, Ala.
Villa Rica Lumber Co., Anniston, Ala.
J. R. Adams & Sons, Birmingham, Ala.
Hawkins & Smith, Birmingham, Ala.
C. T. Hughes & Co., Birmingham, Ala.
Riddle & Simpson, Birmingham, Ala.
Southern Supply Co., Birmingham, Ala.
Marbury & Jones, Bozeman, Ala.
D. W. & U. Blacker, Brewton, Ala.
W. W. Weaver, Castleberry, Ala.
J. A. Dudley, Clanton, Ala.
O. A. Duke, Clanton, Ala.
L. B. Wells, Clanton, Ala.
H. C. Higman & Co., Decatur, Ala.
Dunham Lumber Co., Dunham, Ala.
Thos. Taylor, Escatawpa, Ala.
W. J. Williams & Son, Eustis, Ala.
Gadsden Lumber Co., Gadsden, Ala.
Tuscaloosa Lumber Co., Hull, Ala.
Downing & Scott, Kirkland, Ala.
Bay City Lumber Co., Mobile, Ala.
E. B. Vaughan, Mobile, Ala.
Alabama Lumber Syndicate, Montgomery, Ala.
S. B. Allen & Co., Montgomery, Ala.
W. A. Drives & Co., Montgomery, Ala.
Moore, Kirkland & Co., Montgomery, Ala.
John Crosby, Pansey, Ala.
S. A. Blasingame, Verbena, Ala.
Wagar Lumber Co., Wagar, Ala.
W. W. Wadsworth, Wadsworth, Ala.
Arkadelphia Lumber Co., Arkadelphia, Ark.
Empire Lumber Co., Ashton, Ark.
Long Bell Lumber Co., Buckner, Ark.
Cotton Belt Mill Co., Cotton Belt, Ark.
Eagle Lumber Co., Eagle Mills, Ark.
Red River Lumber Co., New Lewisville, Ark.
A. J. Neimeyer Lumber Co., Waldo, Ark.
Fordyce Lumber Co., Fordyce, Ark.
The Florida Phosphate Co., Ltd., Phosphoria, Fla.
J. S. Betts & Co., Ashburn, Ga.
Gress Lumber Co., Atlanta, Ga.
Wilson Coal & Lumber Co., Atlanta, Ga.
Donalson Lumber Co, Donalsonville, Ga.
Perkins Manufacturing Co., Augusta, Ga.
Stillwell, Millen & Co., Savannah, Ga.
E. B. Hunting & Co., Savannah, Ga.
Georgia Lumber Co., Savannah, Ga.
F. F. Putney, Hardaway, Ga.
Charles Bewich & Co., Hazelhurst, Ga.
Alderfer & Bull, Isabella, Ga.
Hogan & Winger, Kensington, Ga.
J. A. Williams, Sumner, Ga.
A. J. Duncan & Co., West Bowersville, Ga.
W. E. Mayne, Carpenter, Ky.
P. Hendrickson, Conant, Ky.
Perkins & Miller Lumber Co., Ltd., Westlake, La.
Lock-Moore & Co., Ltd, Westlake, La.
R. J. Aycock, Longstreet, La.
C. P. Brasher, Marthaville, La.
Joseph Horst, Maugansville, Md.
Elliott, Crawford & Co., Myrtle, Miss.
P. B. Myers & Son, Myrtle, Miss.
Ocean Springs Lumber Co., Ocean Springs, Miss.
B. J. Cansey, West, Miss.
Cary E. Spence, Pass Christian, Miss.
Keystone Lumber & Imp. Co., Bogue Chitto, Miss.
J. S. Blackburn, Ellisville, Miss.
W. L. Rankin & Bro., Shannon, N. C.
A. E. Rogers, Mullins, S. C.
R. F. Moss, Booker, Va.
The A. F. Withrow Lum. Co., Millboro Depot, Va.
U. B. Simpson & Son, Naruna, Va.

North Carolina Pine.

Page Lumber Co., Aberdeen, N. C.
The Greenville Land & Imp. Co., Greenville, N.C.
Guilford Lumber Mfg. Co., Greensboro, N. C.
Goldsboro Lumber Co., Goldsboro, N. C.
G. Vyne & Son, Wilkesboro, N. C.
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Cypress.

Morris & England, Keo, Ark.
Cypress Lumber Co., Sherrill, Ark.
T. O. Wilson Lumber Co., Tillar, Ark.
Nuchner & Brown, Peach Orchard, Ark.
Moline Lumber Co., Helena, Ark.
J. M. Milburn & Bro., Greenway, Ark.
J. C. McCain, Greenway, Ark.
W. R. Emerson, Emerson, Fla.
J. C. Burleigh, Midland, Fla.
F. S. Bamberg, Jasper, Fla.
S. J. Temple, Temple's Mills, Fla.
J. P. Little, Sumner, Fla.
Geo. H. Barker, Waldo, Fla.
A. A. Bunnell, Raulerson, Fla.
Windemere Land & Lumber Co., Windemere, Fla.
Kelly, Cosby & Co., Jug Tavern, Ga.
Dietrich & Dopson, Lenox, Ga.
W. T. McArthur, McArthur, Ga.
W. H. Moxley & Co., Macon, Ga.
W. R. Peterson & Co., Wadley, Ga.
Lawless & Kyle, Franklin, La.
Louisiana Cypress Lumber Co., Harvey, La.
Callahan & Lewis Mfg. Co., Patterson, La.
McEwen & Murray, New Orleans, La.
Hanson & Smith, Wilmington, N. C.
J. C. Fulton, Aransas Pass, Texas.
Calcasieu Lumber Co. Austin, Texas.
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Bridgeport Lumber Co., Bridgeport, Ala.
Hill & Mitchell, Center Star, Ala.
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Clifton & Hendrix, Jasper, Ala.
Elliott & Carter, Jasper, Ala.
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Desha Lumber Co., Arkansas City, Ark.
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Russell & Elder, Beebe, Ark.
South'n Hardwood Lumber Co., Black Rock, Ark.
E. M. Ford Land & Timber Co., Gilmore, Ark.
Kelley & Wells Lumber Co., Newport, Ark.
Cream City Lumber Co., Lamberthville, Ark.
J. M. Meflert, Lowell, Fla.
Ray & Geise, Bronwood, Ga.
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Montford & Mitchell, Butler, Ga
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Green & Eshum, Clay Hill, Ga.
W. H. Allen, Cordele, Ga.
Greer Bros., Ada, Ga.
D. T. Harris, Dixon, Ga.
W. T. Opie, Dover, Ga.
A. J. McMullen, Hartwell, Ga.
Matthews & Anderson, Knoxville, Ga.
R. W. Ballard, Newton Factory, Ga.
O. W. Wadley, Rogers, Ga.
L. T. Brawner, Adairville, Ky.
G. W. Hummer, Adairville, Ky.
W. Conn & Son, Bedford, Ky.
Snider Bros., Berea, Ky.
Gibson & Hale, Flat Lick, Ky.
J. L. Naylor, Wickliffe, Ky.
Samuel Anglen, Lafayette, Ky.
H. E. Miller, Lewisburg, Ky.
Fetter Cochran & Co., Louisville, Ky.
J. C. Williamson, Mouth of Pond, Ky.
The Cumberland Co., Middlesborough, Ky.
Waters & Bringhurst, Pineville, La.
J. H. McBride, Winnfield, La.
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John Hoagland, Spring City, Tenn.
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J. Bradley, Hartsell's, Ala.
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G. N. Buchanan, Luverne, Ala.
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Mountain & Sons, Mobile, Ala.
C. G. Richards & Son, Mobile, Ala.
Stewart & Butt, Mobile, Ala.
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F. McKay, Black Rock, Ark.
Camden Shingle Mill Co., Camden, Ark.
Price Lumber Co., Paragould, Ark.
Carey & Ollinger, Bagdad, Fla.
A. L. Wellman & Co., Beresford, Fla.
Florida Shingle Mills, Brooksville, Fla.
W. Springstead & Son, Brooksville, Fla.
Mearns Shingle Mill, Davenport, Fla.
Wm. A. McCann, Jacksonville, Fla.
A. G. Russel, Oviedo, Fla.
Little & Chapman, Rosewood, Fla.
Atlanta Lumber Co., Atlanta, Ga.
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Yarbrough & Perry, Fullington, Ga.
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Baily Bros., Toccoa, Ga.
Mayfield Shingle Co., Wishart, Ga.
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E. Cravens, Bagwell, Texas.
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Gurley & Rogers, Norfolk, Va.
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Montgomery Stave & Bldg. Co., Montgomery, Ala.
J. C. Sheets & Co., Montgomery, Ala.
P. V. Deland, Black Rock, Ark.
Hammett & Bailey Stave Co., Greenway, Ark.
Arkansas Stave Works, Greenway, Ark.
J. F. Hasty & Son, Paragould, Ark.
G. M. Rosegrant, Paragould, Ark.
Wilson Bros., Piggott, Ark.
Backus Bros., Pine Bluff, Ark.
Little Rock Cooperage Co., Little Rock, Ark.
Tampa Lumber Co., Tampa, Fla.
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Georgia & Tennessee Lumber Co., Laconte, Ga.
F. H. Waring & Co., Cement, Ga.
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Southern Real Estate Directory.

For the convenience of the many readers of the MANUFACTURERS' RECORD it has been deemed advisable to collect under this head a reliable list of Realty Agencies of the Southern States. The value of such a list for the purpose of Ready Reference will immediately become apparent to all who are interested in the growth of this section.

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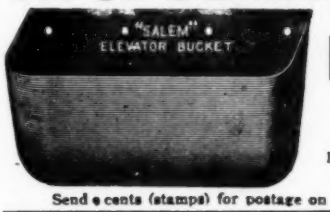

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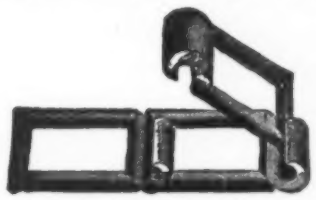
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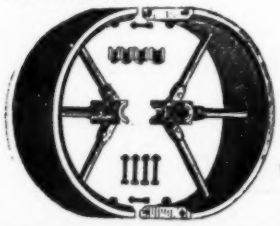
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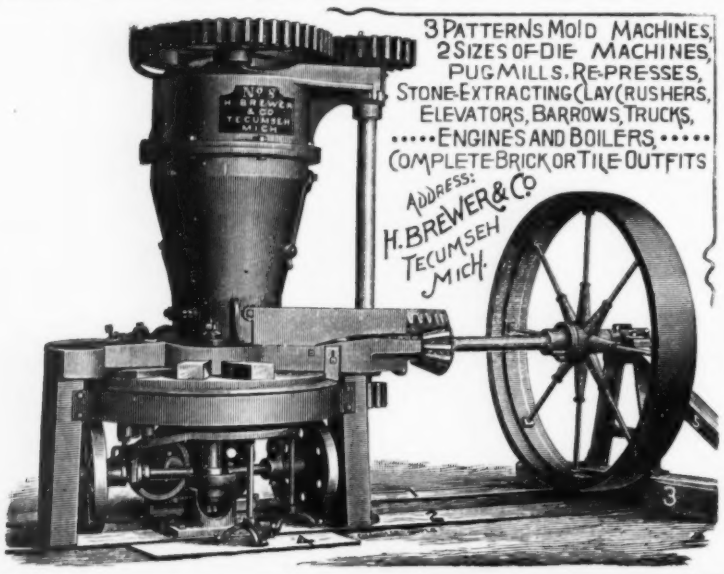

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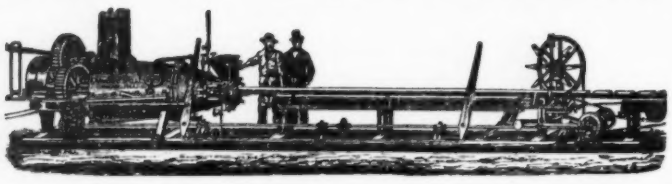

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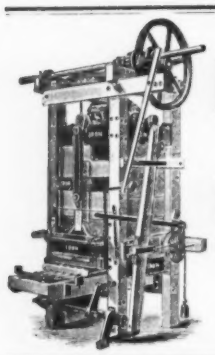

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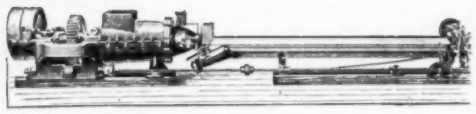

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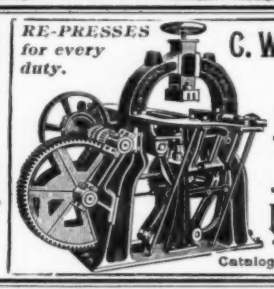

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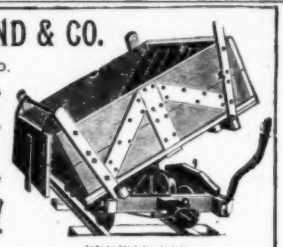

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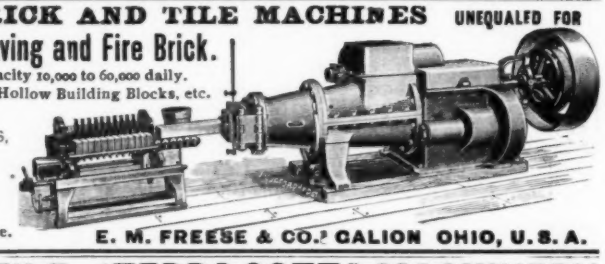

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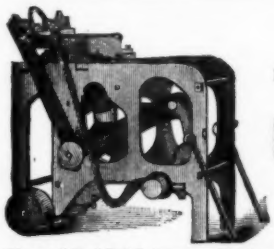

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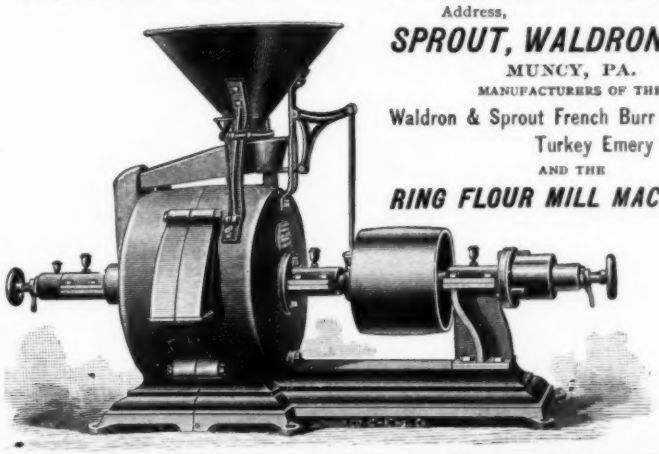

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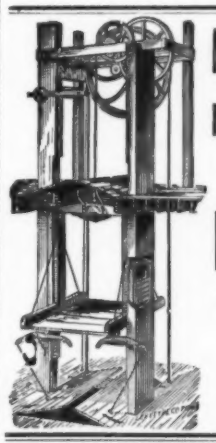

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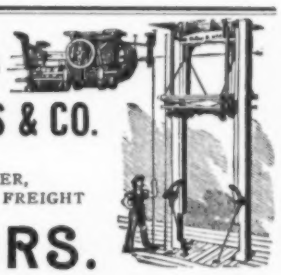

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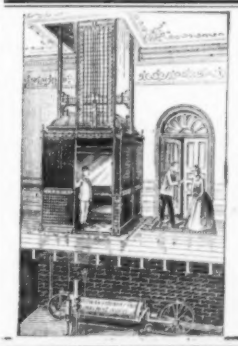

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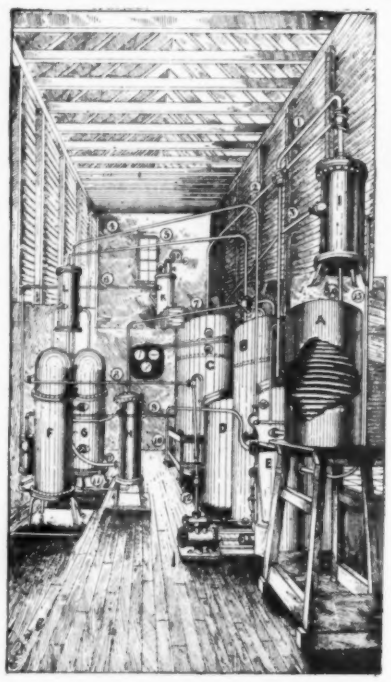

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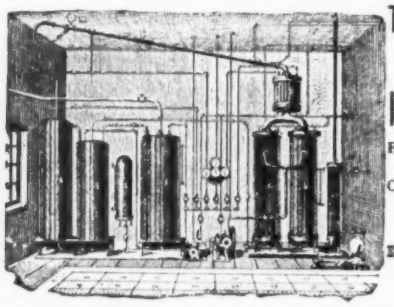

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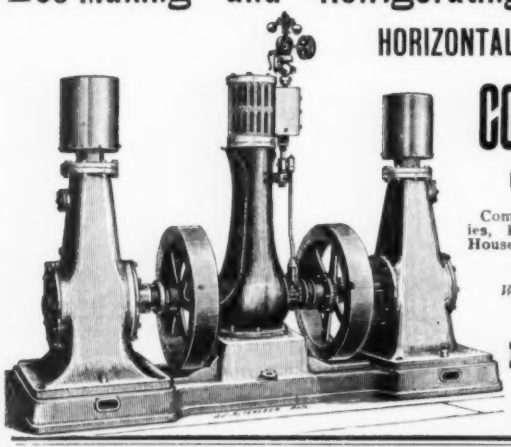

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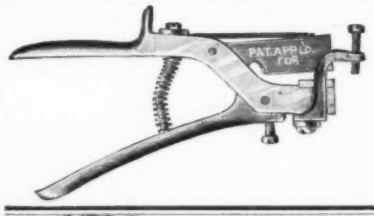

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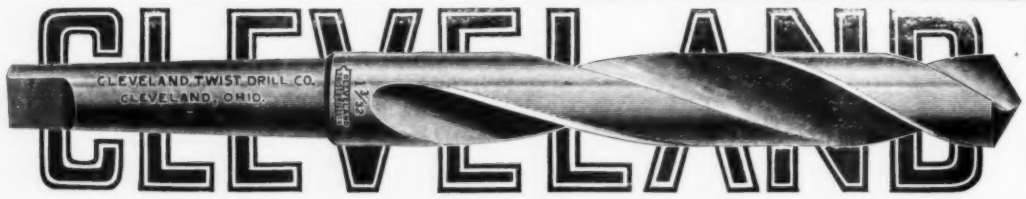

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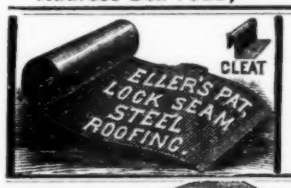

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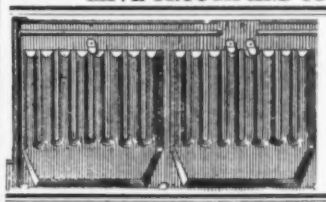

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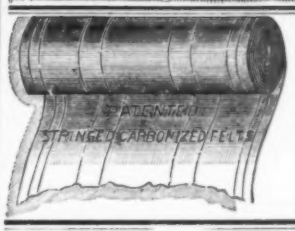

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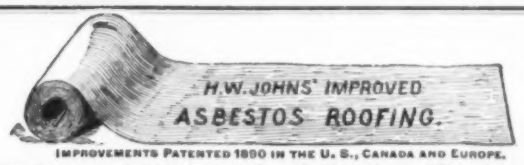

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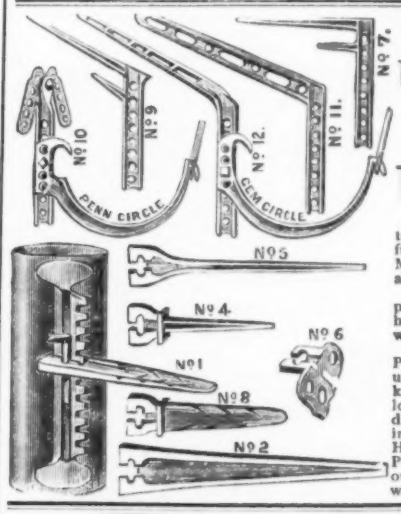

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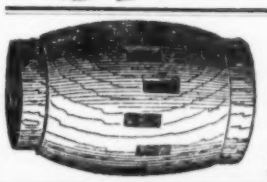

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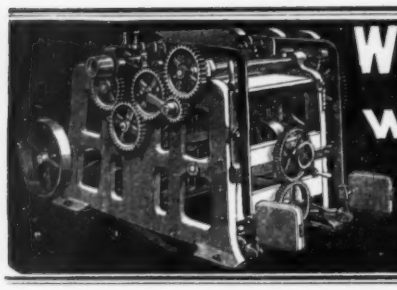

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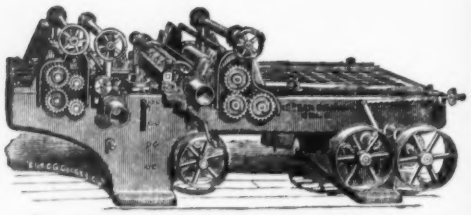

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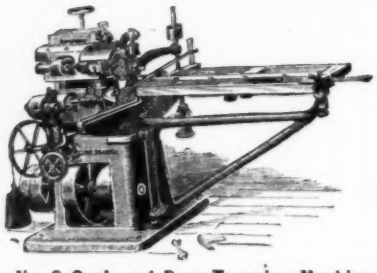

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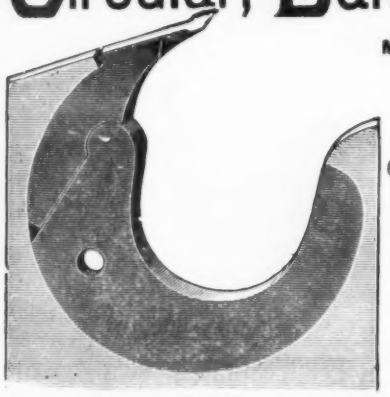

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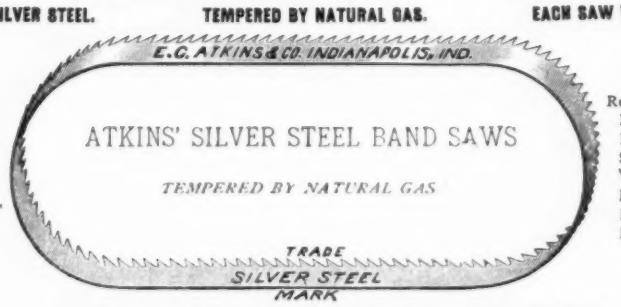

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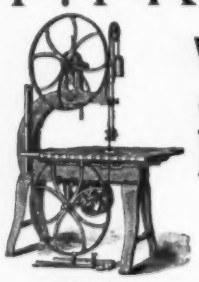

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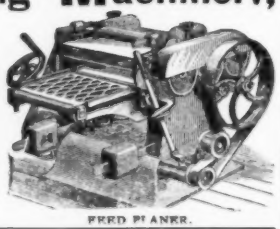

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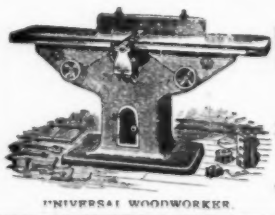

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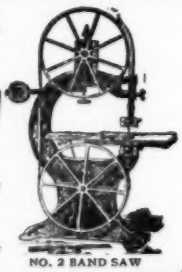

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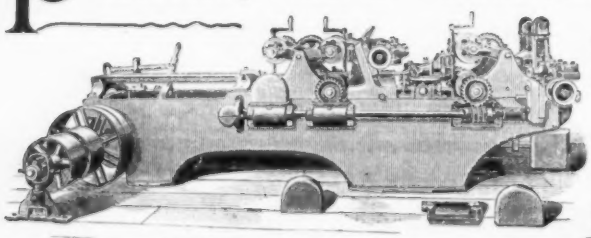

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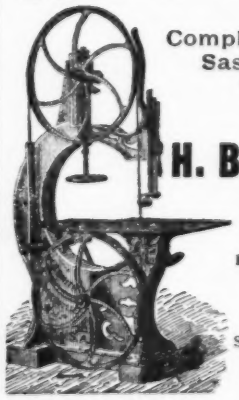

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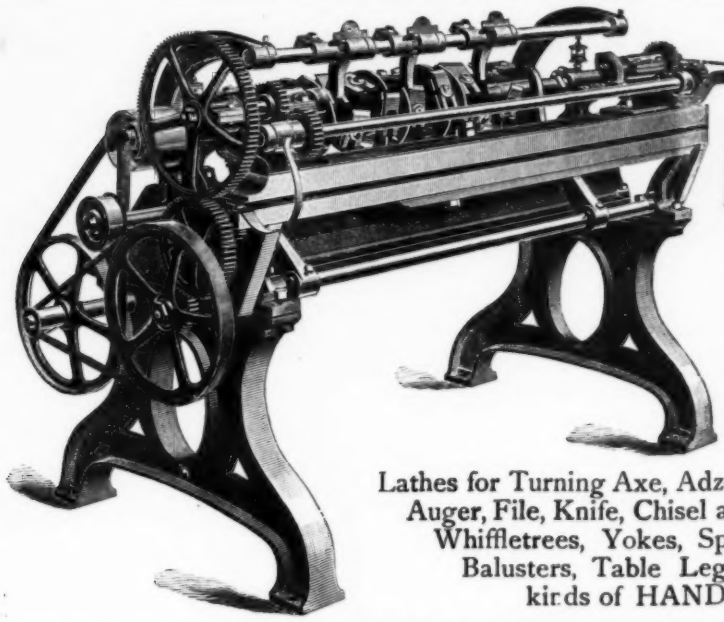

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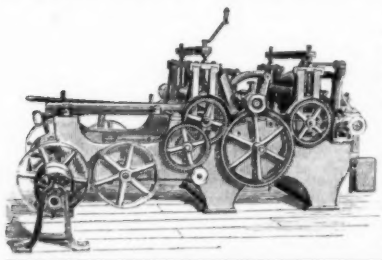

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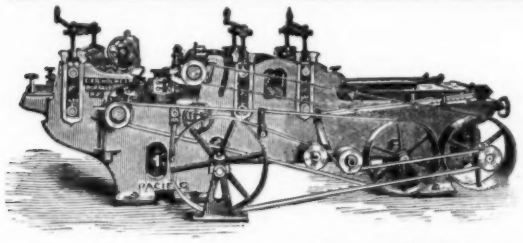

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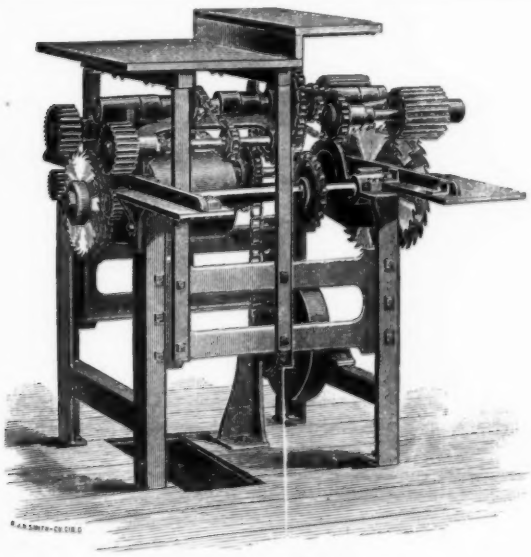

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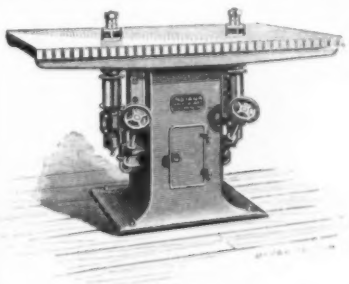

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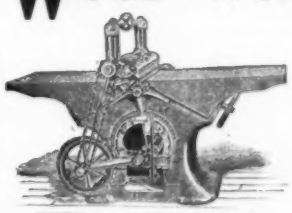

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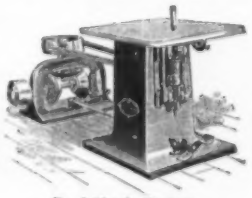

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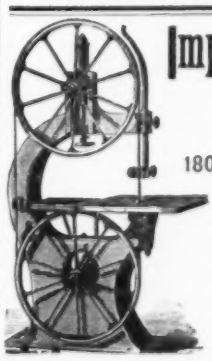

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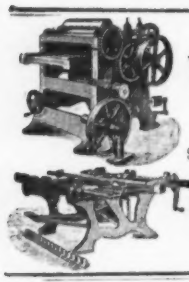

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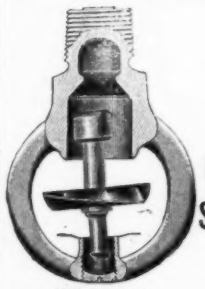

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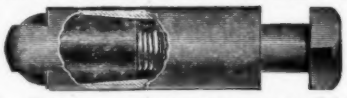

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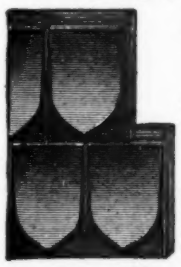

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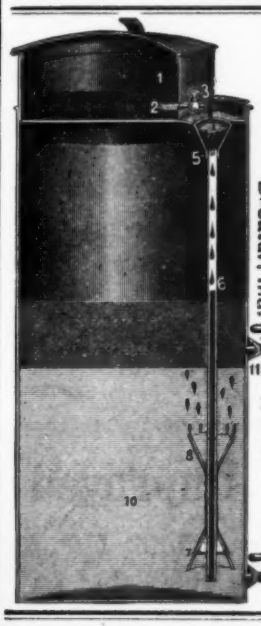

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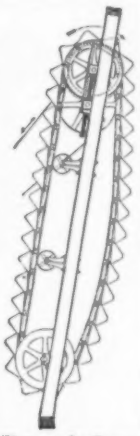

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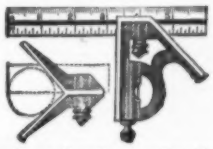

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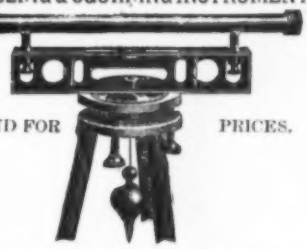

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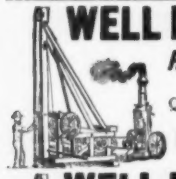

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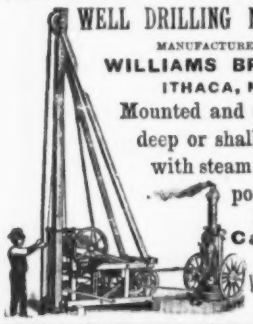

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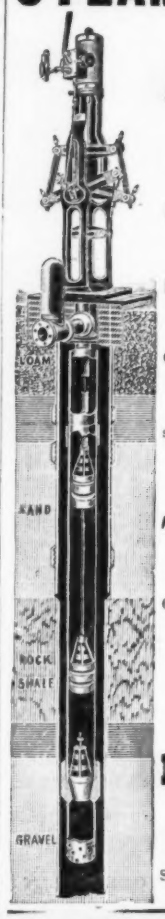

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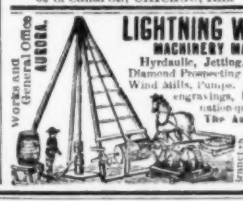

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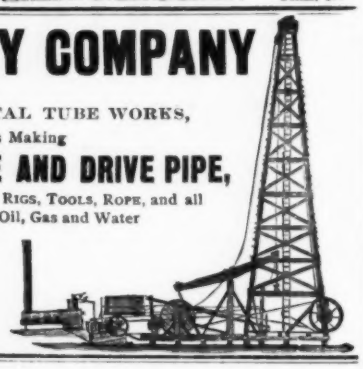

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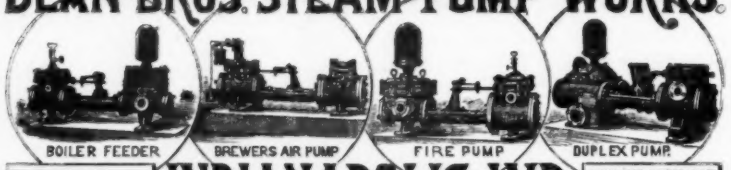

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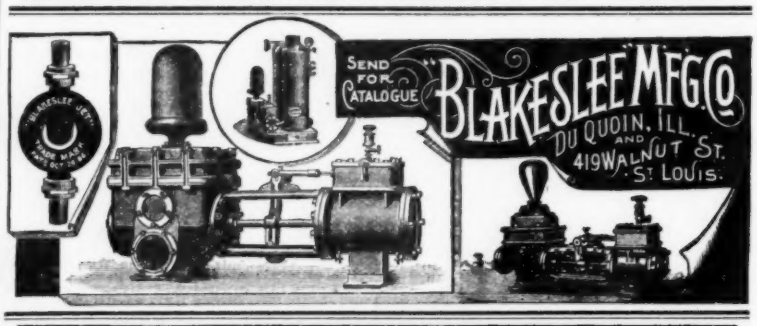

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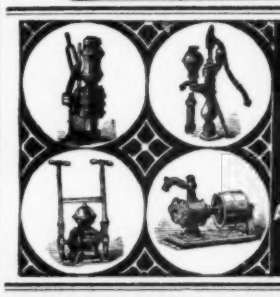

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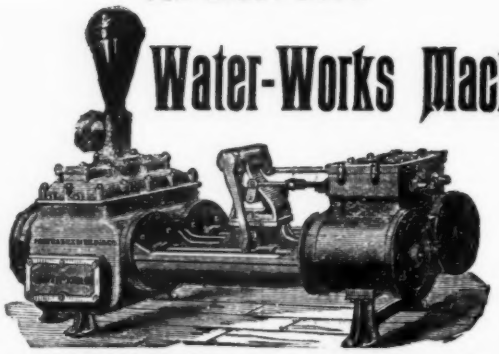

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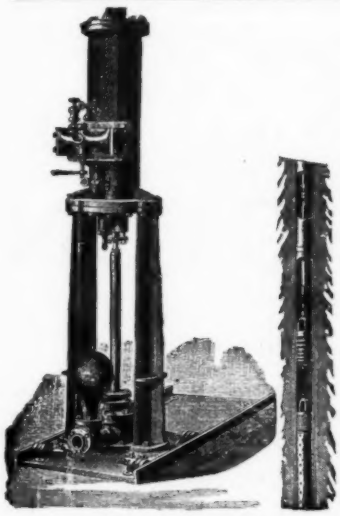

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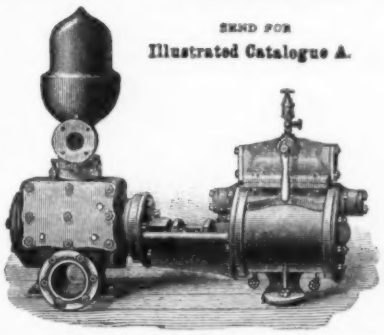

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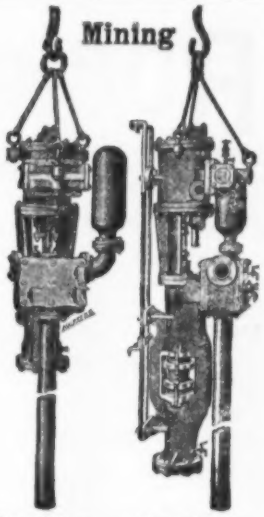

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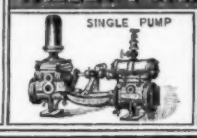

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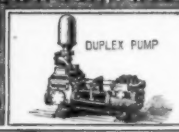

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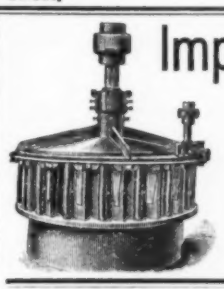

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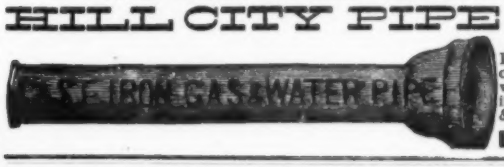
H. E. McWANE, President and General Manager. W. D. CAMPBELL, Secretary and Treasurer.
THE CLAMORGAN COMPANY, Proprietors of
HILL CITY PIPE WORKS



Manufacture all kinds of Blast Furnace, Coking and Mining Machinery; Boilers, Engines, Tramway and Construction Car Castings, and Tobacco Machinery, &c. Prices on application.
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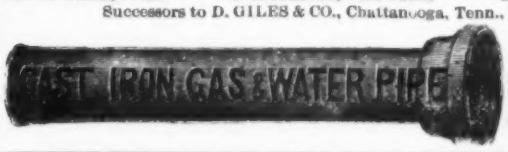

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of Every Description Made to order.

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Office and Works, 938 to 954 River St., and 67 to 83 Vail Ave., TROY, N. Y.
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Double and Single Gate, ½ inch to 48 inch; outside and inside Screws, Indicators, etc., for Gas, Water, Steam, Oil.
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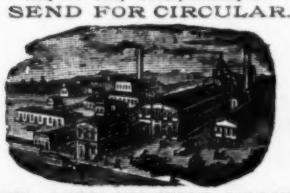

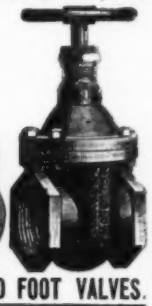

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FOR WATER WORKS, GAS WORKS, CULVERTS.
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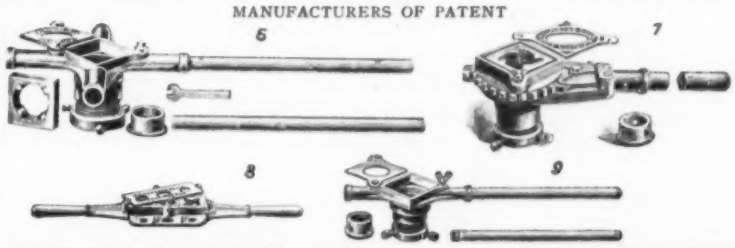

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Threading Pipe ⅛ in. to 6 in. The larger sizes have CUTTING OFF attachment. These Tools are Light, Strong and of Superior Design and Finish. Also
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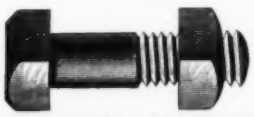

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ROCKY MOUNT,

NORTH CAROLINA,

On the Atlantic Coast Line, 125 miles South of Richmond, Va. Offers the most flattering opportunities for business and investment of any town in the South. During the past year the

POPULATION increased from **1,194** to **2,500**; 185 new dwellings and stores, and seven new Tobacco Leaf Houses have been built. All are occupied and the demand is not half filled.

ROCKY MOUNT COTTON MILLS are increasing their capacity from 15,000 to 30,000 spindles, and in the fall will employ 300 additional hands.

TOBACCO BUSINESS of the town has more than doubled in capacity. There are three large warehouses and fourteen leaf houses now in operation.

ATLANTIC COAST LINE RAILROAD are building their main yards and shops here. Several buildings are under roof, miles of track laid, coal shutes, etc., erected; **200** new hands will be employed this fall; next year three times that number. All this has been accomplished in one year.

MERCHANTS AND MANUFACTURERS—Rocky Mount is the most promising point for business in the whole South.

INVESTORS—Look at Rocky Mount, the return will be large, sure and quick. For information write

Rocky Mount Improvement and Manufacturing Co.

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To Manufacturers of Hardwoods. **To Manufacturers of Brick.**

To Manufacturers of Cotton.

To Prospective Manufacturers Looking Toward the South to Locate,

AND

TO CAPITALISTS.

WASHINGTON

LOUISIANA.

A CITY OF 1,800 PEOPLE.

Offers More Practical and Substantial Inducements Than Any Other Town in the South.

First.—At the very doors of Washington are VAST VIRGIN FORESTS of Hickory, Oak, Walnut, Magnolia, Cypress, and every variety of the Finest Hardwoods, so easy of access that Black Walnut and Hickory are cut for cordwood. The forests are practically inexhaustible, extending for 100 miles along the Bayou Courtableau, Bayou Cocodrie and Bayou Bouef, upon which waterways Washington is situated. Magnificent opportunities for hardwood manufacturing exist at Washington.

Second.—Washington already possesses such industries as:

A Large Cotton Factory (cost $50,000.)
A Saw Mill.
A Drain Pipe and Tile Works.
A Steam Brick Mill.
An Oil Factory.
Three Cistern Factories.
A 100-saw Cotton Gin.
A Sash and Blind Factory.
Fifteen Large General Stores.
Churches, Schools and every advantage of an old-established town.

Third.—Washington is AT THE HEAD OF NAVIGATION of Bayou Courtableau, and enjoys cheap transportation by water to New Orleans, the East and West, and low freights by both water and rail via the Southern Pacific Railway, which runs through the town. The cost of raw material and the finished product is thus reduced to a minimum, and the saving on Northern and Western freights alone make a profit of 10 to 25 per cent. to manufactories located here.

Fourth.—Washington is situated in St. Landry Parish, adjoining the famous Teche Sugar Country, and every diversity in crops is grown. Some of the largest sugar plantations in Louisiana adjoin Washington, and rice, cotton, corn and oats yield enormous crops.

Fifth.—Labor in abundance is available for small manufacturing plants at very low cost.

WASHINGTON INVITES INQUIRIES.

For detailed information regarding its advantages and inducements for new industries address

LEON WOLFF, Mayor, Washington, La.

INVESTORS.—Attention is called to inducements offered by the town of

CLAREMONT, VA.

Fine Location for Factories, Mills, etc. Situated on the James river (deep water). Address

Claremont Citizens' Improvement Committee.

CLAREMONT, SURRY CO., VA.

GOLD, COPPER, SILVER TIN, MANGANESE COAL, NICKEL, IRON, ASBESTOS, LITHOGRAPHIC STONE, GYPSUM, DOLOMITE, SOAPSTONE, PHOSPHATE OF LIME, TALC, ETC.. **For Sale.**

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FREE SITES & BUILDINGS

FOR LEGITIMATE

MANUFACTURERS!

DO YOU wish a better location for your plant than the one you occupy at present?

DO YOU desire factory sites and buildings erected after your own plans and specifications as a donation?

WE OFFER YOU a choice of locations in ILLINOIS, OHIO, INDIANA, &c. also in the cities of CHICAGO, MILWAUKEE, ST PAUL, DULUTH, &c. with lowest freight rates to and from all points.

ADDITIONAL CAPITAL ALSO PROCURED

WRITE FOR PARTICULARS

YOUR BUSINESS WILL BE TREATED CONFIDENTIALLY AND PROMPTLY.

REFERENCES GIVEN UPON REQUEST.

ADDRESS F. S. MORDAUNT & CO.

CHAMBER OF COMMERCE BLDG, CHICAGO

THIRD NATIONAL BANK BLDG, CINCINNATI, O.

THE SOUTH BALTIMORE HARBOR & IMPROVEMENT COMPANY.

THE SOUTH BALTIMORE HARBOR & IMPROVEMENT CO. is the owner of about 1,500 acres of land and five miles of water front adjoining the city of Baltimore, on the south side of the Patapsco river.

LOCATION.

The land is beautifully located, running from the water's edge, gradually to a height of about 200 feet; is free from malarial influences, and is generally considered one of the healthiest locations adjoining the city.

WATER FRONT.

The center of the water front consists of the famous land-bound harbor of Curtis Bay, with an average depth of water of 25 feet.

MANUFACTORIES.

The advantages of this locality for manufacturing purposes cannot be over-estimated. The best proof of this assertion is that capitalists have within the last few years selected it in preference for large manufacturing enterprises, such as a Sugar Refinery, Barrel Factory, Car Works, Foundry, Nut and Bolt Manufactory, the Ryan-McDonald Machine Shops, which were removed from Waterloo, N. Y.; the Beckwith Rolling Mills, which were removed from Paterson, N. J., besides others now in contemplation of erection.

LABOR.

The great advantage of this place as to labor, is the town of SOUTH BALTIMORE, adjoining the factories, containing hundreds of substantial brick houses, for the employees of these various works. (There are now being built by the Company, as well as by others, blocks of houses, in addition to the above.)

BALTIMORE & OHIO R. R. CO.

The Baltimore & Ohio Railroad runs through this property, and has a terminus at Curtis Bay.

ELECTRIC RAILWAY.

An Electric Railway is now completed from the City of Baltimore to the Sugar Refinery (near the southern limits of this property), the fare upon which will be only five cents, the cars to be run every ten minutes, and thereby making it a part of Baltimore City, as well as easy of access at all hours.

CHURCHES.

The town contains a Presbyterian, a Catholic, a Methodist, a Baptist and an Episcopal Church.

BUILDING LOTS.

Capitalists and Builders to erect houses in this growing town, both for sale or to rent, will find a rare opportunity for investment; as the demand for houses is greater than the supply.

The Company will sell or lease water fronts, or lots for manufacturing and for dwelling purposes, at moderate rates.

Manufacturers will find it to their interest to examine this property before locating elsewhere.

For particulars and prices, apply to

WILLIAM S. RAYNER, President,

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CHARLES F. CLARK, President.

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UPRIGHTS, GRANDS AND SQUARES.

Highest grade Instruments manufactured. Endorsed and preferred by the best schools and musical authorities. Only Upright Piano on the market to-day equal to the Grand. Reasonable terms. Old pianos taken in exchange. Pianos for rent. A large assortment of Organs constantly on hand. Send for illustrated piano and organ catalogue. Inducements on second-hand Pianos.

Tuning promptly attended to.

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What is more acceptable than
AN ESTEY ORGAN, AN ÆOLIAN,
A WEBER, A DECKER BROS.,
ESTEY, FISCHER or an
IVERS & POND PIANO?

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A VIOLIN, A CORNET, A FLUTE,
A MANDOLIN, A GUITAR, A BANJO,
A MUSIC BOX, Etc., Etc.

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Fifth Avenue 58th and 59th Streets, N.Y. The Highest Class. **Plaza** ABSOLUTELY FIRE-PROOF. American and European Plans.

The water and ice used are vaporized and frozen on the premises, and certified to as to purity by Prof. Chas. F. Chandler.

LOCATIONS FOR FACTORIES

Chicago, Milwaukee & St. Paul Railway Co.

INDUSTRIAL DEPARTMENT.

The Chicago, Milwaukee & St. Paul Railway Company desires to have the raw material on its 6,150 miles of road in Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota utilized.

In addition to the vast agricultural resources, its territory comprises forests of hard and soft wood, mines of iron and other metals, coal and other minerals, quarries, clays of all kinds, tan-bark, flax and other products. Water-powers (both river and artesian) are also still available.

A number of new factories have been induced to locate—largely through the instrumentality of this Company—at enterprising towns on its lines.

As the interest of the Company is to secure the location of industries at places where the surroundings will insure their permanent success, the information furnished a particular industry is pertinent and reliable.

The people on the whole System are one live and thriving community of business men in whose midst it is safe and profitable to settle. Local capital is being largely invested in local factories, and taken as a whole, the country through which the road runs is commanding attention as the coming industrial territory of the United States. Solid concerns, manufacturers, large or small, who thoroughly understand their business are sought for at suitable points on the road.

Individuals or companies wishing to embark capital in Western industry can find a profitable field.

For particulars relative to industrial advantages on the line, address

LUIS JACKSON,

INDUSTRIAL COMMISSIONER.

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ATLANTIC TRANSPORT LINE.
BETWEEN BALTIMORE AND LONDON.

Calling at Swansea and Philadelphia on the outward passage.

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S.S. Maryland, 4,200 tns. S.S. Michigan Bldg.
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BALTIMORE STORAGE & LIGHTERAGE CO.

236 La Salle Street, Chicago, Ill. } and { 10 Fenchurch Street, London.
400 Second Street, Baltimore, Md.

RICHMOND AND YORK RIVER LINE.

On and after MONDAY, February 29, 1892, the steamers of this line leave Baltimore daily (Sunday excepted) at 5 P. M. for West Point, Richmond and the South, arriving at Richmond at 9.10 A. M., connecting with trains of the Richmond & Danville System. Steamer leaving Mondays, Wednesdays and Fridays calling at Gloucester Point and Allmond's Wharf; steamer leaving Tuesdays, Thursdays and Saturdays calling at Yorktown and Clay Bank. Through tickets and bills of lading issued to all points of the Richmond & Danville System. Way freight must be prepaid. Fare to Richmond, first class, $2.00, second class, $1 50. Tickets sold and baggage checked at Geigan & Co.'s, 205 East Baltimore Street.

REUBEN FOSTER, General Manager. E. J. CHISM, Gen. Freight & Ticket Agt.
Office, 530 LIGHT STREET.

THE BAY LINE

FOR

Fortress Monroe, Norfolk and the South.

The Bay Line comprises the New and Elegant Steamers

"VIRGINIA," "CAROLINA" and "FLORIDA."

All the Comforts and Luxuries of a first-class Hotel are afforded the traveler. Spacious and elegant Saloons and Staterooms, furnished with an especial view to comfort. Unsurpassed Cuisine, which is made a specialty with this Line. Elegant service and courteous attention. Steamers leave Baltimore daily (except Sundays) at 9 P. M.

At Old Point Comfort is located the Splendid HYGEIA HOTEL, a Delightful Resort at all Seasons of the Year. For Tickets and Information apply at Company's Office,

157 W. BALTIMORE STREET, BALTIMORE.

Or on Board of Steamers.

D. J. HILL, Superintendent,
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THE FAVORITE PASSENGER ROUTE.

MERCHANTS & MINERS'

Transportation Company.

Steamers sail from Baltimore Md., TO BOSTON, Mass., VIA NORFOLK, every TUESDAY, THURSDAY and SATURDAY at 2 P. M.

FARE—First-Class, $10.00 Round Trip, $20 00
Second-Class $8 00.

FOR PROIDENCE, R. I., every TUESDAY and THURSDAY at 2 P. M.

FOR SAVANNAH, Ga., every TUESDAY and FRIDAY at 3 P. M. Fare—First class, $15.00; round trip, $25.00; second class, $10.00.

Baltimore TO JACKSONVILLE, Fla.—First class, $20.65; round trip, $36.30; steerage, $12 50.

All tickets include meals and stateroom accommodations. Through tickets sold and baggage checked to all points South.

For sailing schedules and other information, apply to A. L. HUGGINS, Agent, Foot of Long Dock, Baltimore, Md.
J. C. WHITNEY, Traffic Manager, No. 216 Water Street, Baltimore, Md.

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BRUNSWICK to LIVERPOOL and BREMEN.

The Only South Atlantic Direct Line to European Ports.

SHORTEST ROUTE TO EUROPE.

Commencing September 30th, 1892, the following Steamships will make regular sailings from Brunswick, Ga., to Liverpool and Bremen:

Steamship.	Tons.	Master.
WIVENHOE,	1893	CLARK.
HAY-GREEN.	1869	BLACKLAW,
J. M. LOCKWOOD,	1772	JENKINS,
STORRA-LEE,	1734	BAILEY,
DEERHILL,	1733	BAINBRIDGE.

Additional Steamships will be placed on the line as business warrants.

S. S. DEERHILL will sail from Liverpool for Brunswick September 1st.

S S. HAY-GREEN will sail from Brunswick for Liverpool September 30th.

Consignments solicited to all points in United Kingdom and Continent of Europe.

For Freight, Passage and general information apply to

THE BRUNSWICK TERMINAL CO.

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S.S. ISTRIAN.....4,000 tons
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FOR LONDON.

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S.S. STRAITS OF BELLEISLE.....3,000 tons
S S. WETHERBY.....2,500 tons

FOR GLASGOW.

S.S. MANDALAY..... — tons
S.S. CYNTHIANA.....4,000 tons
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FOR HAVRE (Pinkney-Furness Lines.)

S.S. NERANO.....4,000 tons

Through Bills of Lading issued to interior points in the United Kingdom, or on the Continent, at very favorable rates. For freight, &c., apply to

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HARTFORD STEAM BOILER INSPECTION AND INSURANCE CO. HARTFORD, CONN.

Issues Policies of Insurance after Careful Inspection of the Boilers, covering Loss or Damage to Property, and Loss of Life and Personal Injury Arising from Steam Boiler Explosions.

Full information concerning the plan of the Company's operations can be obtained at the **COMPANY'S OFFICE, Hartford, Conn.,** or at any Agency.

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BRANCHES.
CHICAGO, 332 DEARBORN ST. NEW YORK, 68 BEEKMAN ST.

A.&W. INK USED ON THIS PUBLICATION.

NORTH WILKESBORO,

NORTH CAROLINA,

One of the Conspicuous Successes of the Year in Town Building, Presents the Following Record:

Population March 4, 1891, actual count, 48.
Population March 4, 1892, actual count, 348.

Gain in one year 625 per cent.

Townsite purchased November 11, 1890; act of incorporation passed by the Legislature, March 4, 1891; first lot sold at private sale, May 12, 1891. Within the first year of its existence ten miles of streets have been graded, and $22,000 spent in public improvements. Where prior to March 4, 1891, there was only a farm settlement without pretensions to being even a village, there is to-day a thriving, busy, growing, trading and manufacturing center, with

A Large Well-Kept Hotel,
The Bank of North Wilkesboro, $40,000 Capital,
A large Livery and Sale Stable,
Two Large Wholesale Stores,
One Hardware Store,
One Furniture Store,
Ten General Merchandise Stores,
Three Saw Mills, Sash and Blind Factories,
One Foundry and Machine Shop,
A Handsome, Well-Edited, Home Print Newspaper, The North Wilkesboro News,
One School,
Two Churches Under Way,
Two Brick Yards in operation, and a number of other enterprises practically secured.
Arrangements are about completed for a Woolen Mill.
A large iron front brick block, containing Bank Building, two Store Rooms, Opera House, and Printing Office; A graded School Building and an Iron Bridge across the Yadkin River, in the Eastern part of town, will be completed during the spring and summer.
Turnpike roads to Tennessee and Virginia are about completed; county roads leading into town are being improved and numerous good new ones built, with the intention of making this the center for all the wagon trade of this section.
A tobacco warehouse for the sale of the high grade leaf of this district will be built during the summer, so as to give a home market for the tobacco crop that will be grown this year.

Compare this record with that of any other new town you have heard of during the past dull season.

NORTH WILKESBORO,

Is 75 miles west of Winston-Salem, at the present terminus of the Northwestern North Carolina Railroad, which when ultimately completed to Bristol, Tenn., will give the shortest route between Norfolk and Cincinnati. North Wilkesboro is the most important trading point between Winston-Salem and Bristol, and is in the center of the great undeveloped mineral and timber district of Northwestern North Carolina, being by United States Postal Map on an air line 75 miles southeast of Bristol, 45 miles east of Cranberry, N. C., 40 miles north of Statesville, 45 miles northeast of Hickory, 90 miles northeast of Asheville, 45 miles southeast of Mt. Airy, and 80 miles south of the Norfolk & Western Railroad, in the valley of the Yadkin, between the Brushy Mountains on the South and the Blue Ridge on the North. Climate, healthfulness, water, drainage and location unsurpassed by any town in North Carolina.

The townsite consists of 1,088 acres, located, by the way on a farm originally owned by General John B. Gordon's grandfather. The first public auction sale of lots was held December 2, 1891, and 188 lots were sold. Purchasers have in many cases been able to resell at a handsome profit. The company has sold 50 lots at private sale since then, on many of which houses are now being erected. It is a significant fact that among the business buildings erected a large per cent. are substantial brick structures, while for architectural beauty and cost many of the residences are much superior to those usually found in a town so young.

At the second auction sale, May 11th, 1892, 35 business lots and 44 residence lots sold for $16,490, an average of $8.35 per front foot, which is $2.53 per front foot (or 44 per cent.) more than the average at the sale last December, which was the best sale made in North Carolina during last year. Since the sale, a contract has been closed for the location of another large saw mill, plaining mill, sash, door and blind factory combined, which will do a large shipping business. A contract is closed for the location of extract works with a capital stock of $300,000. The plant will cost $125,000 and will cover six acres of land. Twelve families from the North will move down. The company will erect a large electric-light plant in connectton with the extract works. North Wilkesboro will get there and will not be long doing so.

Through the townsite runs a stratum of serpentine stone, 200 feet in width, and also a bed of iron ore equal in quality to that of Cranberry. The Town Company also owns 4,100 acres of mineral, granite and timber lands in Wilkes County. It is probable that the work of developing the great mineral and timber interests of the section will be commenced in a short time, and on an extensive scale.

Sites will be donated and stock subscribed to such manufacturing enterprises as may be advantageously located here.

The policy of the Company is a most liberal one in this respect, it being determined to aid all legitimate enterprises to any reasonable extent. There are 328 miles of water courses within the borders of Wilkes County, furnishing to the vicinity of North Wilkesboro a water power as great as Fall River. The climate, while not moist, is neither harsh nor dry, and is especially suitable to the spinning of fine cotton yarns, such as cannot be made in the extreme South or North. There is also a fine opportunity here for bleacheries, to the establishment of which at Southern points there is a tendency at present. As they can't go where sluggish streams, impregnated with vegetable matter, abound, the quick flowing streams of clear mountain water, so numerous about North Wilkesboro, afford everything desired. Numerous other industries will do well at North Wilkesboro, and will be most substantially encouraged to locate there.

Capitalists, Home Seekers, Health Seekers, Manufacturers of wood and iron, and many other industrial workers may well investigate North Wilkesboro's advantages.

The above-described townsite and other property belongs to the Winston Land & Improvement Co., which was chartered by act of Legislature, session of 1887; ratified March 4, 1887, chapter 82. Authorized capital $1,000,000. Present capital stock $125,000, all subscribed and paid up.

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Of Iron and Wood and for General Industrial and Business Enterprises,

FRONT ROYAL, VA.

INVITES INVESTIGATION.

Its location, at the junction of the Norfolk & Western Railroad (Shenandoah Valley line) and the Richmond & Danville's branch, give it excellent transportation facilities. It is only a few hours' ride distant from Washington. The Norfolk & Western's direct line to Washington will be built from Front Royal.

There is no Finer Agricultural Country in the World than the Famed Shenandoah Valley, in which Front Royal is Located.

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INVESTIGATION OF ITS ADVANTAGES IS INVITED BY THE

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See decision of United States Circuit Court of Appeals in case of Edison Electric Light Company and Edison General Electric Company, against Sawyer-Man Electric Company, decided Dec. 5, 1892.

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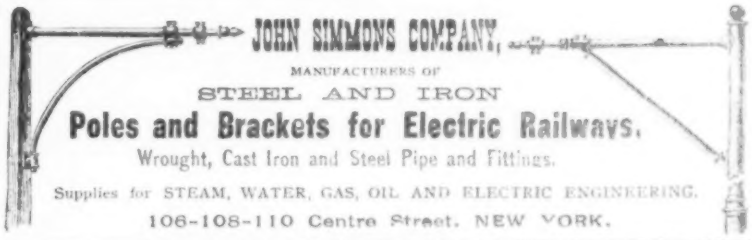

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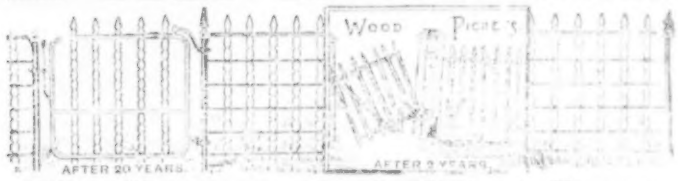

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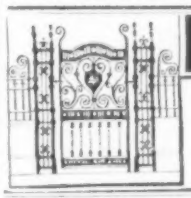

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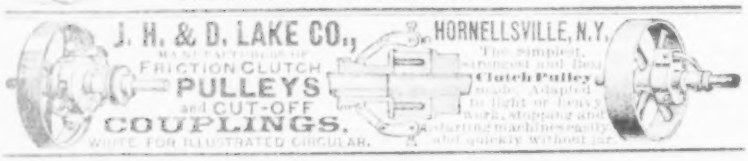

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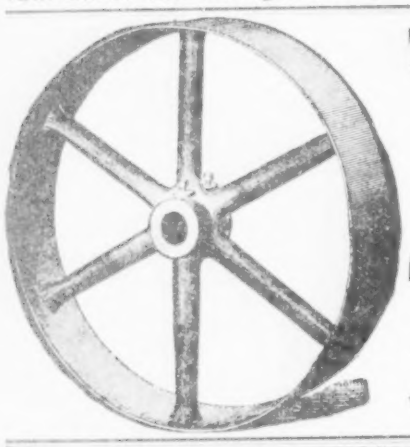

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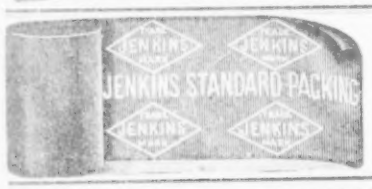

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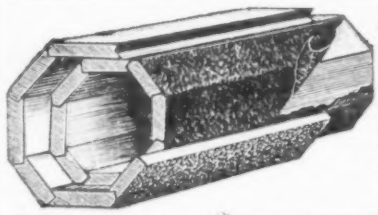

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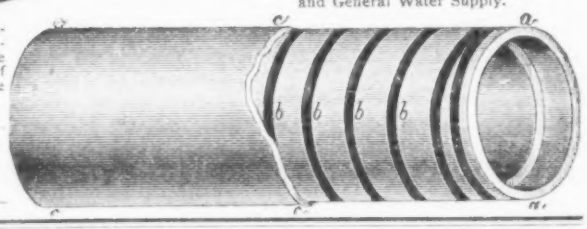

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